



ARCHAEOLOGY HANDBOOK

REVISED 2024

Compiled and edited by Historic Places Team

Copies of the Archaeological Handbook and section updates can be obtained from:

Lincolnshire County Council
Places Directorate
Historic Places Team
Lancaster House
36 Orchard Street
Lincoln
LN1 1XX

The handbook can also be viewed on Lincolnshire County Council's Web site (table of contents gives up-to-date version numbers for each chapter):

Lincolnshire County Council

ISBN: 0-9545300-3

Copyright 2024

FOREWORD

to first edition

On November 1990, Lincolnshire's County Town played host to Baroness Blatch as she introduced the Secretary of State's Planning and Policy Guidance Note 16, at its launch in Lincoln. Today I have great pleasure in being able to introduce another Lincolnshire first the launch of the County's Archaeological Handbook.

Lincolnshire is the fourth largest county in England and is made up of eight district landscape zones from fenland to limestone ridge and chalk wold. Each topographical zone with it own individual archaeological resource and associated archaeological management challenges. From the burial mounds of the Wolds with its 93 long barrows and the medieval monasteries of the Witham Valley, to the county's stunning deserted medieval villages and the Bronze Age landscapes buried under the peat of the fens. Lincolnshire has monuments to rival anywhere in Europe.

Not only is there significant archaeological resource in the county, but also a large number of archaeological organisations. The archaeological handbook comes out of a need to establish a consistent approach to the implementation of PPG 16 and to put in place effective long-term management of the archaeological resource. I would like to thank the various organisations for their input into this manual. I also pay tribute to the staff of the County Archaeological Section for their work in bringing together these organisations, and for being able to produce a document which has received county wide support. The publishing of the handbook is, however, not a time for complacency, as it is only through its use that the shortcomings of such a document become evident. To this end, there will be regular updates as issues arise or legislation changes.

I hope this manual fills the perceived need for such a document, and that your own particular project problems are lessened by implementing its advice. If you have any comments on how to improve the manual do not hesitate to contact the staff of my Archaeological Section: your comments can then be considered for incorporation during one of the regular reviews.

I M Croft
Chairman of Highways and Planning Committee
Lincolnshire County Council 1998

Foreword

to fourth edition

The first edition of the Lincolnshire Archaeology Handbook was issued by Lincolnshire County Council in 1998 as a response to the need to establish a consistent approach to management of the county's archaeological resource and the implementation of Planning Policy Guidance 16 (PPG16).

The handbook has been reviewed and updated as issues have arisen. The publication of Planning Policy Statement 5 (PPS 5) on 23 March 2010 as a replacement of PPG 15 (historic buildings) and PPG 16 (archaeology) necessitated a thorough review and re-write to incorporate and reflect the content of PPS 5. PPS 5 has itself since been superseded by the National Planning Policy Framework and this, together with a review of museum deposition guidelines has necessitated an updated version of the Lincolnshire Archaeological Handbook.

As previously although there might be an overlap in recording and assessment of historic structures this version does not attempt to address conservation issues and for this aspect readers are referred to the conservation officer at the relevant planning authority.

The new policy framework is designed to interweave all the previous separate guidance documents for different aspects of planning into one overall framework, enabling readers to find all of the guidance in one place. The policies for the historic environment are generic and apply to both above ground and below ground historic assets as well as giving guidance on the landscape and settings of these assets.

The new framework largely clarifies the previous guidance and confirms the need for planning authorities to require assessments of heritage impacts when planning applications are submitted. Where new development impacts on underlying remains it also guides planning authorities on the discharge of associated planning conditions in a way which caters for each phase of work from the approval of the scheme of works, through the fieldwork, post excavation work and deposition of the archives with the relevant receiving museum.

It is hoped that this Handbook will assist all users, planners, developers, consultants and archaeological contractors in the sometimes complicated processes required to achieve professional standards and meet the requirements of the National Planning Policy Framework.

If you have any comments on how to improve the manual please do not hesitate to contact the Historic Environment staff in the Places Team at Lincolnshire County Council.

Dr Beryl Lott
Places Manager
Lincolnshire County Council July 2016.

TABLE OF CONTENTS - (Valid from 15th August 2024)

Chapter 1 SUMMARY (v3.1)

PART 1 - INTRODUCTION

Chapter 2 GENERAL OUTLINE (v2.3 2019)

- 2.1 Introduction
- 2.2 Historic environment resource management
- 2.3 The manual
- 2.4 The manual in practice
- 2.5 The manual's readership
- 2.6 The aim of the manual

Chapter 3 THE HISTORIC ENVIRONMENT AND THE LAW (v4.1 2019)

- 3.1 Introduction
- 3.2 Background
- 3.3 Ancient Monuments and Archaeological Areas Act 1979
- 3.4 Scheduled Monuments
- 3.5 Scheduled Monument Consent
- 3.6 Other provisions of the 1979 Act
- 3.7 The Listed Building and Conservation Areas Act 1990
- 3.8 Historic England
- 3.9 Town and Country Planning
- 3.10 Government Guidance
- 3.11 Treasure Act 1996
- 3.12 Miscellaneous Acts

Chapter 4 HISTORIC ENVIRONMENT AND THE PLANNING PROCESS (v4.1 2019)

- 4.1 Introduction
- 4.2 Legislation
- 4.3 Local Development Framework (LDF)

- 4.4 Development control process
- 4.5 Historic Environment and development control
- 4.6 Pre-planning undertakings
- 4.7 The archaeologists' role
- 4.8 Standard archaeological conditions for planning permissions
- 4.9 Refusal of planning permission
- 4.10 The role of the developer
- 4.11 Environmental assessment

Chapter 5 TYPES OF ARCHAEOLOGICAL WORK (v4 2024)

- 5.1 Introduction
- 5.2 Background
- 5.3 Pre-application / Pre-determination
- 5.4 Appraisal
- 5.5 Desk-based assessment (desk-top study)
- 5.6 Building appraisal, assessment and / or Statement of Significance
- 5.7 Evaluation (pre-determination)
- 5.8 Non-intrusive field work (pre-determination)
- 5.9 Field work (pre-determination)
- 5.10 Mitigation Strategy
- 5.11 Post-determination
- 5.12 Scheme of Works (post determination)
- 5.13 Topographic Survey
- 5.14 Excavation/preservation by record (post determination)
- 5.15 Environmental Sampling
- 5.16 Guidance for large schemes

Chapter 6 ARCHAEOLOGICAL PROJECT MANAGEMENT (v2.3 2019)

- 6.1 Introduction
- 6.2 Background
- 6.3 Historic England guidance – MoRPHE
- 6.4 Staged management model
- 6.5 Stage 1 – Start Up
- 6.6 Stage 2 – Initiation

- 6.7 Stage 3 – Execution stages
- 6.8 Stage 4 – Closure
- 6.9 Applying the management model
- 6.10 Professional standards and funding

PART 2 - ARCHAEOLOGICAL CODE OF PRACTICE

Chapter 7 ORGANISATION OF ARCHAEOLOGICAL PROJECTS (v3.1 2019)

- 7.1 Introduction
- 7.2 The brief
- 7.3 The specification
- 7.4 Mitigation strategy

Chapter 8 THE BRIEF (v2.3 2019)

- 8.1 Introduction
- 8.2 Project planning
- 8.3 Summary of the contents of a brief
- 8.4 The contents of the brief
- 8.5 Default

Chapter 9 SPECIFICATION AND PROJECT DESIGN (v2.3 2019)

- 9.1 Introduction
- 9.2 Background to a specification/project design
- 9.3 General contracting arrangements
- 9.4 The contents of a specification
- 9.5 Default

Chapter 10 ARCHAEOLOGICAL METHODOLOGY (v2.4 2019)

- 10.1 Introduction
- 10.2 Background
- 10.3 Site Location
- 10.4 Consideration of Techniques
- 10.5 Earthwork Survey
- 10.6 Fieldwalking

- 10.7 Geophysical Survey
- 10.8 Environmental Evidence
- 10.9 Trial Excavation
- 10.10 Test Pitting
- 10.11 Building Recording
- 10.12 Use of Specialists

Chapter 11 GENERAL CONSIDERATIONS (v3.0)

- 11.1 Introduction
- 11.2 Background
- 11.3 Underlying principles for historic environment work
- 11.4 Project aims and objectives
- 11.5 Legal and ethical considerations
- 11.6 Site access
- 11.7 Health and safety
- 11.8 Insurance
- 11.9 Copyright

Chapter 12 RECORDING SYSTEMS (v2.4 2019)

- 12.1 Introduction
- 12.2 Background
- 12.3 Long-term needs
- 12.4 The Collection
- 12.5 Requirements

Chapter 13 ARTEFACT HANDLING (v2.1)

- 13.1 Introduction
- 13.2 Background
- 13.3 Processing
- 13.4 Basic record
- 13.5 The finds report
- 13.6 The finds archive
- 13.7 Environmental samples

- Chapter 14 SPECIALISTS (v1.0)
 - 14.1 Specialists working in Lincolnshire
 - 14.2 Pottery specialists
 - 14.3 Human and faunal remains
 - 14.4 Registered small finds
 - 14.5 Conservation Work

- Chapter 15 THE REPORT (v2.3 2019)
 - 15.1 Introduction
 - 15.2 Background
 - 15.3 Purpose of report
 - 15.4 Relevance
 - 15.5 Draft report stage
 - 15.6 Report content

- Chapter 16 DISSEMINATION & PUBLICATION (v3)
 - 16.1 Introduction
 - 16.2 Background
 - 16.3 County Historic Environment Record
 - 16.4 Local archaeological journal
 - 16.5 OASIS
 - 16.6 Press and mass media
 - 16.7 Museum displays

- Chapter 17 THE ARCHIVE (v4.0)
 - 17.1 Introduction
 - 17.2 The Heritage Service and the archive
 - 17.3 Composition of the archive
 - 17.4 Accession numbers and site codes
 - 17.5 Procedure for notifying museum of work and depositing archives
 - 17.6 Consultation
 - 17.7 Finds specialists
 - 17.8 Selection, retention and dispersal
 - 17.8.1 Retention and dispersal rationale

- 17.8.2 Human remains
- 17.8.3 Sampling
- 17.8.4 Industrial processes
- 17.8.5 Structural remains
- 17.8.6 Disposal from completed archives
- 17.9 LEGAL TITLE
- 17.10 COPYRIGHT
- 17.11 CHARGING POLICY

PART 2 – FINDS ARCHIVES

- 17.12 CONSERVATION AND INVESTIGATION OVERVIEW
 - 17.12.1 Stabilisation of the assemblage
 - 17.12.2 Investigation of finds
- 17.13 CONSERVATION OF OBJECTS
 - 17.13.1 Levels of conservation
 - 17.13.2 Remedial conservation
 - 17.13.3 Investigative conservation
 - 17.13.4 Aesthetic improvement
 - 17.13.5 Additional points
- 17.14 INVESTIGATIVE TECHNIQUES
 - 17.14.1 X radiography
 - 17.14.2 Other analyses
- 17.15 OBJECT PACKAGING
 - 17.15.1 Object packaging principles
 - 17.15.2 Bulk finds – non sensitive
 - 17.15.3 Bulk finds – sensitive
 - 17.15.4 Registered finds
 - 17.15.5 Environment
- 17.16 OBJECT MARKING
 - 17.16.1 Principles of object marking
 - 17.16.2 Object marking requirements

- 17.16.3 Locating the mark
- 17.16.4 Suitability of an object for marking
- 17.16.5 Marking an object

PART 3 – DOCUMENTARY ARCHIVES

17.17 THE DOCUMENTARY ARCHIVE

- 17.17.1 Documentary archive marking
- 17.17.2 Documentary archive contents
- 17.17.3 Documentary archive materials
- 17.17.4 Drawings and plans
- 17.17.5 Photography overview
- 17.17.6 Traditional film photographs
- 17.17.7 Transparencies
- 17.17.8 Digital photographs
- 17.17.9 Digital media
- 17.17.10 X-radiography

APPENDIX A – COLLECTING AREA MAP

APPENDIX B – NOTIFICATION FORM

APPENDIX C – ARCHIVE BOX SIZES AND SUPPLIERS DETAILS

APPENDIX D – TRANSFER OF TITLE FORM

PART 3 – MONITORING AND CONTINGENCY

Chapter 18 MONITORING (v2.1)

- 18.1 Introduction
- 18.2 Background
- 18.3 General principles
- 18.4 Monitoring in practice
- 18.5 Aspects to be monitored
- 18.6 Reporting

Chapter 19 CONTINGENCY (v2.1)

- 19.1 Introduction

- 19.2 Background
- 19.3 The Responsibility of the Archaeological Contractor
- 19.4 Contingency
- 19.5 Discovery of Remains during Development

PART 4 – APPENDICES (v4.0)

BIBLIOGRAPHY

- APPENDIX 1 Legislation relevant to archaeological heritage management
- APPENDIX 2 Secretary of State for Culture, Media and Sport’s criteria for scheduling ancient monuments
- APPENDIX 3 Model for archaeological project management
- APPENDIX 4 Sources for desk-based assessment
- APPENDIX 5 Application form for Burial Act 1857 Section 25 licence to exhume
- APPENDIX 6 Site monitoring report form
- APPENDIX 7 List of useful addresses
- APPENDIX 8 Selected glossary of terms
- APPENDIX 9 Abbreviations used in this manual
- APPENDIX 10 Pottery Fabric Lists

1. SUMMARY (v3.1)

1.1 Lincolnshire County Council believes that we should:

record, protect, develop and promote our cultural heritage

(Lincolnshire County Council; Caring for the Environment – corporate environmental policy 2007)

1.2 The historic environment is all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora. These elements of the historic environment that hold significance are called heritage assets.

1.3 A heritage asset is a building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions.

1.4 The county of Lincolnshire possesses a wide variety of heritage assets which are a physical record of thousands of years of human development and activity. These assets are a fragile and non-renewable resource. These assets vary from the still visible remains of castles and monasteries to the buried remains of settlements from prehistory through to medieval times to the remains of World War II defences. One of the county's greatest assets are the pleasant and appealing quality of its market towns and villages, vernacular cottages, farm buildings and great county houses. These provide examples and unique combinations of various forms, styles and materials representative of various forms, styles and materials representative of the economic, social and aesthetic influences of different periods in history. Some heritage assets are deemed to be of significance and are protected by designation, either as Scheduled Monuments (SM), or as Listed Buildings (LB).

1.5 It is recognised that many heritage assets are under increasing threat from development and other forms of land use. In response to these threats the government have set out its objectives for the historic environment and the rationale for its conservation in 2018 (minor update 2019) in the National Planning Policy Framework (NPPF).

The government recognises **“the wider social, cultural, and environmental benefit that conservation of the historic environment can bring.”** NPPF

1.6 The implementation of effective procedures is dependent upon the existence of a good local policy foundation. Development plan policies tend to vary and this has led to a variety of

approaches to the treatment of the historic environment by planning authorities, to whom it is just one of a number of factors to consider when processing planning applications.

- 1.7 This document seeks to set practical guidelines for a consistent approach to the historic environment within the planning process in. It outlines the principles of modern historic environment resource management and details those aspects of the process of relevance to Lincolnshire. As a result it is hoped to establish effective long-term management of the county's archaeological and built heritage.

PART 1

INTRODUCTION

2. GENERAL OUTLINE (v2.3)

2.1 Introduction

This chapter outlines the objectives of this document and the reasons for its production as well as identifying its expected readership.

2.2 Historic environment resource management

Current government guidance reminds us that heritage assets are an irreplaceable resource. This resource ranges from such rare sites as early prehistoric camps through ruined medieval abbeys to the remains of World War Two air-bases. All forms of cultural remains are subject to decay and deterioration. Development impacts, farming practices, recreational use by tourists and natural erosion processes all have an effect upon these fragile remains. For many such reasons the historic environment requires careful management. **In particular, this document addresses the main management issues resulting from the impact of development.**

2.3 The manual

This manual consists of guidelines for all those involved in the implementation of historic environment projects mainly initiated as a result of the town and country planning process or equivalent. Nevertheless many other forms of activity, not governed by planning law, can have an impact upon the historic environment. The manual will be of value to all involved in related work but it will be of particular value to applicants, developers, planning officers, along with archaeological consultants and contractors (historic environment professionals), as it aims to establish best practice for dealing with planning issues. This document is intended to minimise difficulties in the planning process and to facilitate the highest quality of historic resource management.

2.4 The manual in practice

The contents of this manual will form the basis for detailed briefs and specifications for archaeological projects and should be read in conjunction with any project-specific documentation. Any variation from the norm as expressed in this manual should be clearly noted in briefs, specifications and project designs.

2.5 The manual's readership

As mentioned in 2.3, the manual has many potential users. For planning officers, conservation officers, planning consultants, applicants, developers and architects its value will be as a reference tool when dealing with historic environment issues. For planning archaeologists, archaeological consultants and contractors (historic environment professionals) (for definitions see section 4.8 and Appendix 10) it has more specific functions:

2.5.1 Planning (Curatorial) archaeologists

The manual sets out guidance on the preparation of briefs (chapters 8 and 11) and the expected content of specifications (chapters 9 and 11). It also establishes a standard required for other aspects of work which should be monitored by the planning archaeologist. To assist in this process there is a section on the monitoring of archaeological fieldwork (Chapter 18).

2.5.2 Consultants

When advising clients, consultants will find it valuable to refer to this manual in order to establish the level of response required and methods used in Lincolnshire.

2.5.3 Contractors

In accordance with the guidance set out in this document, planning archaeologists in Lincolnshire may prepare briefs when initiating historic environment projects. The general requirements are now laid out in this document and contractors should refer to it at all times. This manual also gives guidance on the content that archaeological curators will expect to see in specifications and project designs (Chapter 9), guidance on the production of reports (Chapter 15), as well as more general considerations (Chapter 11) to be borne in mind by all those carrying out historic environment projects in Lincolnshire.

2.6 The aim of the manual

As archaeology and the historic environment has become increasingly linked to the development industry through the planning process so commercial pressures have led to competitive practices. In order to ensure that those competing for historic environment contracts are doing so on equal terms such guidelines as these are essential. The existence of standards should not be allowed to discourage the development of archaeological techniques. Specifications or project designs which vary from the guidance given in this document but which justify their reasons for

doing so in terms of good archaeological practice will be considered by the Planning Archaeologists. To this end this manual will be regularly reviewed to take account of developments. To ensure that the readership is up to date with reviewed sections each chapter has a version number (e.g. v1.0) which is referenced in the table of contents, which itself is dated. If in any doubt regarding the currency of any chapter please contact the Historic Places Team at Lincolnshire County Council for an up to date table of contents.

3. THE HISTORIC ENVIRONMENT AND THE LAW (v4.1)

3.1 Introduction

This chapter outlines the legislative framework which under-pins modern historic environment resource management. It outlines selected legislation both directly and indirectly applicable to historic environment professionals.

3.2 Background

Since the early 1990s the management of the historic environment has become increasingly influenced by national legislation. While there remain few statutes that are primarily constructed for the better management of archaeological sites and monuments *per se*, considerable recent legislation has touched upon historic environment matters. There are numerous Acts of Parliament that can be used by those concerned with the management of the historic environment. (See Appendix 1)

3.3 Ancient Monuments and Archaeological Areas Act 1979

There is one Act which is central to archaeological resource management; the Ancient Monuments and Archaeological Areas Act 1979, as amended by the National Heritage Act 1983. This Act consolidated all previous Ancient Monuments legislation which had originated with the Ancient Monuments Protection Act 1882. The 1979 Act consists of three main parts of which the first deals with Ancient Monuments, the second with Archaeological Areas and the third with Miscellaneous and Supplemental provisions. The provisions under Part Two of the Act, relating to Areas of Archaeological Importance, have only been adopted in five historic cities, Canterbury, Chester, Exeter, Hereford and York, and will not be discussed further here.

3.4 Scheduled Monuments

Part one of the 1979 Act enables the Department for Culture, Media and Sport (DCMS) to maintain a schedule of nationally important sites. For the purposes of the Act a monument is defined as:

- a) "any building, structure or work, whether above or below the surface of the land, and any cave or excavation;

b) any site comprising the remains of any such building, structure or work or of any cave or excavation; and

c) any site comprising, or comprising the remains of, any vehicle, vessel, aircraft or other moveable structure or part thereof which neither constitutes nor forms part of any work which is a monument as defined within paragraph a) above;

d) and any machinery attached to a monument shall be regarded as part of the monument if it could not be detached without being dismantled.”

The Act further defines an ancient monument as “any Scheduled Monument; and any other monument which in the opinion of the Secretary of State is of public interest by reason of the historic, architectural, traditional, artistic or archaeological interest attaching to it”, In order to decide which monuments are of national importance and also deemed best managed by scheduling there exist eight non-statutory criteria. The criteria are survival/condition, period, rarity, fragility/vulnerability, diversity, documentation; group value and potential (see Appendix 2 for further detail). The Act also indicates that monuments may be protected not only by designation as a Scheduled Monument but also by being taken under ownership or guardianship of the Secretary of State or a local authority (see 3.6 below) or by being in an area of archaeological importance.

3.5 Scheduled Monument Consent

In order to carry out works to these monuments the consent of the Secretary of State (in consultation with Historic England is required although a special provision of the Act gives certain activities 'class consent'. Specific consent has to be given for:

a) "any works resulting in the demolition or destruction of or any damage to a Scheduled Monument;

b) any works for the purpose of removing or repairing a Scheduled Monument or any part of it or of making any alteration or additions thereto; and

c) any flooding or tipping operation on land in, on or under which there is a Scheduled Monument”.

It is illegal to carry out any of the above works to a Scheduled Monument without consent. If such works will also require planning permission English Heritage should

be contacted. Guidance notes are offered by Historic England at <https://historicengland.org.uk/advice/planning/consents/smc/>.

3.6 Other provisions of the 1979 Act

The Act also provides for the protection of sites in ways other than by scheduling. Specifically there exists the potential for central or local government to take a site into Guardianship whether that monument is scheduled or not. Further monuments whether scheduled or not can be brought into management agreements or may even be compulsorily purchased to safeguard their long-term preservation, it is also an offence to use a metal detector on a Scheduled Monument or any other protected site without the written consent of Historic England (it should be noted that this also applies to geophysical survey).

3.7 The Listed Building and Conservation Areas Act 1990

The Listed building and Conservation Areas Act 1990 provides specific protection for buildings and areas of special architectural or historic interest. On 2nd November 2009 Historic England took on all administration of the listing system from The Department of Culture Media and Sport (DCMS). The changes help to achieve the aims of the ongoing heritage protection reform programme by making the process more streamlined and transparent. Owners and local authorities will now have the opportunity to comment on information collated by Historic England on a building before their recommendation goes to the Secretary of State for Culture, Media and Sport for consideration. It is hoped that consultation with a wider audience will result in a more comprehensive understanding of a building, which will better inform the decision-making process. Importantly, the option to consult will remain flexible to allow for a swift response in protecting buildings at immediate risk.

3.7.1 Listed buildings

The buildings contained within the list are graded I, II* and II according to their relative importance.

Buildings are 'Listed' because they are considered to be of special architectural or historic interest and as a result require special protection. Listing protects the whole of the building, both internally and externally. The listing of a building also protects any object or structure within its curtilage which forms part of the lands and has done so before July 1948.

The prime purpose of the list is to protect the building and its surroundings from changes which will materially alter the special historic or architectural importance of the building or its setting.

In order to carry out works to a listed building (anything that may physically affect a listed building or the setting of a listed building), listed building consent must be obtained from the local planning authority (in consultation with Historic England).

3.7.2 Conservation Areas

Section 69 of the Act imposes a duty on local planning authorities to designate as conservation areas any 'areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance'. Designation of these areas gives greater control over demolition and alterations made to unlisted buildings within the conservation area.

3.8 Historic England

The National Heritage Act 1983 established the Historic Buildings and Monuments Commission of England, more commonly known as English Heritage, and provided for the establishment of services of education, public information, research and record keeping. In April 2015 English Heritage separated into two bodies. A new charity retaining the name English Heritage now looks after the National Heritage Collection and a newly named organisation called Historic England which continues the statutory role of giving expert, constructive advice to owners, local authorities and the public, and championing the wider historic environment. Historic England (along with Cadw in Wales, Historic Scotland and the DOE Northern Ireland) act as the government's advisers on the built heritage. Central to the role of Historic England is

the advice they give to local planning authorities, government departments and owners on development proposals affecting the historic environment.

"Constructive Conservation' expresses the role that we play in promoting a positive collaborative approach to conservation that focuses on actively managing change, The aim is to accommodate the changes necessary to ensure the continues use and enjoyment of heritage assets while recognising and reinforcing their historic significance. Our advice seeks to minimise the loss of significance to these assets. We also look for opportunities to enhance the historic environment. 'Historic England 2015

Historic England's vision is 'that people value and care for heritage. That the understand and celebrate it, see how everyone benefits from it, and feel a sense of connection to and ownership of it' Historic England 2019

3.9 Town and Country Planning

Another main area of legislation which is central to effective archaeological management is that relating to town and country planning. There is considerable legislation on this matter most of which emanated from the Town and Country Planning Act 1947. Although some nationally important monuments (see section 3.4 above) are protected under the provisions of the Ancient Monuments and Archaeological Areas Act 1979 the only protection afforded to other sites is under the planning law

The 1995 amendment to The Town and County Planning (General Permitted Development) order defines what constitutes an area of archaeological interest.

“site of archaeological interest” means land which is included in the schedule of monuments compiled by the Secretary of State under section 1 of the Ancient Monuments and Archaeological Areas Act 1979 (schedule of monuments), or is within an area of land which is designated as an area of archaeological importance under section 33 of that Act (designation of areas of archaeological importance), or which is within a site registered in any record adopted by resolution by a county council and known as the County Sites and Monuments Record;”

If a site of proposed development, which by its nature requires planning permission, is in an area which is protected as a Scheduled Monument then this will be needed in addition to any Scheduled Monument Consent.

3.10 Government guidance

The provisions of Acts of Parliament have been supplemented and enhanced by the Department for Communities and Local Government (DCLG) in the National Planning Policy Framework (NPPF) and previously Planning Policy Statements (PPSs), Planning Policy Guidance Notes (PPGs). Planning Policy Statements were prepared by the Government after public consultation to explain statutory provisions and provide guidance to local authorities on planning policy and the operation of the planning system. They also explained the relationship between planning policies and other policies which have an important bearing on issues of development and land use. The majority of these (but not all) and the minerals documents have now been superseded by a single National Planning Policy Framework (2018) which sets out the Governments planning policies for England and how these are expected to be applied. Local authorities must take their contents into account in preparing plans. The National Planning Policy is supported by a number of Planning Practice Guidance Notes.

3.11 Treasure Act 1996

The Treasure Act 1996, which came into force in 1997, replaced the common law of Treasure Trove. It provides effective legal protection to antiquities in the United Kingdom, providing a code which provides guidance to finders, museums and coroners. It sets out guidelines to determine if an object should be offered to a museum or to the finder or to any other person, and what the reward, if any, should be.

Treasure is:

- Any metallic object, other than a coin, provided that at least 10% by weight of the metal is precious (silver or gold) and that it is at least 300 years when found. If the object is of prehistoric date it will be treasure provided any part of the metal is either silver or gold.
- Any group of two or more metallic objects of any composition of prehistoric date that came from the same find.
- All coins from the same find provided that they are at least 300 years old when found (but if the coins contain less than 10% of gold or silver there must be at least ten of them).

Only the following group of coins will normally be regarded as coming from the same find:

- Hoards that have been deliberately hidden
- Smaller groups of coins, such as the contents of purses that may have been dropped or lost.
- Votive or ritual deposits.

- Any object, whatever it is made of, that is part of the 'same find' as another object that is Treasure. An object or coin is part of the 'same find' as another object or coin if it is found in the same place as, or had previously been together with, the other object. Finds may have become scattered since they were originally deposited in the ground.
- Any object that would have previously been Treasure Trove, but does not fall with the specific categories given above. Only objects that are less than 300 years old, that are made substantially of gold or silver, that have been deliberately hidden with the intention of recover and whose owners or heirs are unknown will come into this category.
- Prehistoric base metal assemblages found after 1st January 2003 also qualify as treasure.

Treasure is not-

- Objects whose owners can be traced.
- Unworked natural objects, including human and animal remains.
- Objects from the foreshore which are wreck.
- Single coins found on their own. Including groups of coins lost one by one over a long period of time.

Any objects deemed to be treasure should be reported to the coroner within fourteen days. Not reporting the find to the coroner is a criminal offence and is punishable by a prison sentence or fine.

For additional information on the Treasure Act see www.finds.org.uk, or the [Advice for finders leaflet](#) - published by MLA. The information in this section has been extracted from this website.

3.12 Miscellaneous Acts

There are many other Acts and pieces of secondary legislation which contain points of significance to archaeology such as the burial of human remains (see 11.6.2 and Appendix 1).

Other legislation which is also of value to archaeological resource managers includes Countryside Acts and the Acts by which the public utilities were transferred to private ownership (see Appendix 1). For example, the Water Industry Act 1991 in Section 3.2(b) requires the National Rivers Authority and water companies "to have regard to the desirability of protecting and conserving buildings, sites and objects of archaeological, architectural or historic interest".

The Electricity Act 1989 requests that electricity operators "have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting buildings and other objects of architectural, historic or archaeological interest".

The Environment Act 1995 also requests that the Environment Agency in any proposal relating to any function of the Agency 'to have regard to the desirability of protecting and conserving buildings, sites and objects of archaeological, architectural engineering or historic interest'. And that it shall be the duty for the Agency in formulating or considering any proposals relating to the function of the Agency 'to give regard of maintaining the availability to the public of any facility for visiting or inspecting any building, site or object of archaeological, architectural, engineering or historic interest and to take into account any effect which the proposals would have on any such freedom of access or on the availability of any such facility'.

4. HISTORIC ENVIRONMENT AND THE PLANNING PROCESS (v4.1)

4.1 Introduction

In this chapter guidance is given on the fundamental elements of the town and country planning process and how the historic environment fits into this system. Some of the overriding concepts in this matter are outlined.

4.2 Legislation

4.2.1 Background

The land use planning system is central to historic environment resource management. The legislative framework that governs this system seeks to establish a balance between the benefits of development (usually economic) and the conservation of the environment.

The place of the historic environment within the planning process has developed over a number of years. In 1979 statutory protection was given to Ancient Monuments in the Ancient Monument and Archaeological Areas Act. The Planning and Policy Guidance 16: Archaeology and Planning (PPG16) was published in 1990 and together with the definition of an archaeological area (see 3.3) The Listed building and Conservation Areas Act 1990 provides specific protection for buildings and areas of special architectural or historic interest and in 1994 the Department of the Environment produced Planning Policy Guidance 15: Planning and the Historic Environment to offer further guidance to the above 1990 Act. In April 2010 planning documents PPG15 and 16 were replaced with Planning Policy Statement 5: Planning for the Historic Environment, this together with the practice guide then formed the basis for all development management decisions.

In March 2012 PPS5 was superseded by a single National Planning Policy Framework (NPPF), this was updated in 2018 and again in 2019, which sets out the Governments planning policies for England, including those policies relevant to the historic environment (section 16: Conserving and enhancing the historic environment), and how these are expected to be applied. A Planning Practice Guidance for this document, produced by Ministry of Housing, Communities and Local Government and most recently

updated in 2019 titled Historic Environment: Advice on enhancing and conserving the historic environment.

4.2.2 National Planning Policy Framework

In March 2018 and later updated in 2019 the Ministry of Housing, Communities and Local Government published the National Planning Policy Framework. This document aims to make the planning system less complex and more accessible, to protect the environment and to promote sustainable growth. It sets out the government's requirements for the planning system but only records what is relevant, proportionate and necessary to do so. It provides a framework for planning by replacing a thousand pages of national planning policies with a short guidance document of just over sixty pages. This is supported by a series of Planning Practice Guidance Notes (PPGs).

This document does not specifically differentiate between historic buildings and archaeology but brings them together using the term **heritage asset**. A heritage asset can be a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authorities (including local listings)

The Government's recognises in the NPPF 'the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring' and recognises that 'heritage assets are an irreplaceable resource'.

4.3 Local Plans

National planning policy places Local Plans at the heart of the planning system, so it is essential that they are on place and kept up to date. Local Plans set out a vision and framework for the future development of the area, addressing needs and opportunities, adapting to climate change and securing good design. They are also a critical tool in guiding decisions about individual development proposals, as Local Plans (together with any neighbourhood plans that have been made) are the starting point for considering whether applications can be approved. It is important for all areas to put an up to date plan in place to positively guide development proposals.

National Planning Policy sets clear expectations as to how a Local Plan must be developed in order to be justified, effective, consistent with national policy and positively prepared to deliver sustainable development that meets local needs and national priorities.

4.4 Development control process

Good communication and liaison between all parties is the key to satisfactory historic environment resource management through the development control process. All areas in England now have an Historic Environment Record (HER) or Sites and Monuments Record (SMR), a database of the area's archaeological and historical resource. Expert staff are available to give advice to students, local researchers, and professional archaeologists as well as to planning officers, conservation officers and developers. County Councils and other local authorities such as City, Borough and District Councils and Unitary Authorities may employ specialist staff to provide historic environment advice. When proposed works affect a Scheduled Monument or its setting the Town and Country Planning General Permitted Development Order 1995 places an obligation upon the local planning authority to consult with Historic England.

Good information is essential for the adequate appraisal of the implications of proposed development on heritage assets. Informal discussions between planners, archaeologists and applicants (or their agents) prior to the submission of a planning application can minimise delays within the planning process.

See appendix 7 for contact details of local authority planning archaeologists and other relevant organisations.

4.5 Historic Environment and development control

Within the development control process, historic environment requirements can be fulfilled in two ways and this is summarised in the flow diagram in Appendix 3. All applications submitted to the local planning authority should contain as a minimum a Heritage Assessment, dependant on the site this can be as little as a paragraph or may require a more detailed and thorough appraisal of the historic assets. If development proposals indicate an impact on heritage assets the local planning authority can request an applicant to submit further information, (NPPF, section 12, para.128) this usually necessitates the undertaking of a desk-based assessment, building appraisal and/or a field evaluation. On the basis of this information the planning decision can be made. Alternatively, if the application is granted permission this can be subject to a condition requesting further archaeological investigation or building recording.

When an archaeological matter is particularly complex the local planning authority may prefer to secure a scheme of works through legal obligations with the applicant under Section 106 of the Town and Country Planning Act 1990, as amended by the 1991 Act.

4.6 Pre-planning undertakings

Free archaeological pre-planning advice is offered to all developers and it is best to contact the planning archaeologist as early as possible before a planning application is submitted. This can save a lot of time and expense later as any potential impacts on heritage assets can be taken into account at the earliest opportunity. It can also mean that the planning archaeologist can discuss appropriate mitigation strategies in order to avoid important archaeology and preserve it in situ. Sometimes the planning archaeologist will require further information about potential archaeology or the importance of a heritage asset before a planning decision can be made. In these cases a traditional desk based assessment, heritage assessment and/or evaluation work will be required before a formal application is submitted to the local planning authority. In certain cases the heritage interest of a particular site may be of such importance that the planning archaeologist may advise that a planning application should be refused, this information can be very valuable to a developer.

The complexity of the historic environment within the planning process has caused many corporate bodies entering the planning process to employ a consultant. By undertaking thorough desk-based assessment (see 5.5, 5.6) and/or field evaluation (see 5.7,5.8 or 5.9 below) during the project design phase, and prior to submitting a planning application the historic environment parts of the planning procedures can be greatly accelerated. The results of such work may form the basis of a mitigation strategy submitted as part of a planning application. This will tell the planning authority how the applicant intends to deal with the archaeological issues.

Often the results of the evaluation will inform a mitigation strategy (which could include sympathetic development design) that would seek to avoid unnecessary damage to elements of the historic environment. On the other hand the results of the evaluation may lead the planning authority to approve the proposals with the appropriate requirements secured by a condition or a legal obligation under the provisions of Section 106.

This process is enshrined in the NPPF, section 16 para 189 requires applicants to describe the significance of the heritage assets affected by development and the contribution to the importance of their setting to that significance. As a minimum it is expected that the relevant HER will have been consulted and the heritage assets themselves should have been assessed using appropriate expertise.

4.7 The archaeologist's role

In developer-funded archaeology there are three main roles for archaeologists. These are defined in the Glossary (see Appendix 8) but it is worth highlighting their respective roles here.

4.7.1 The **Planning (or Curatorial) Archaeologist** is normally employed by a local authority. Their role is to give specialist and technical advice to the local planning authority on archaeological matters. To districts with internal advice available a second opinion on archaeological matters can be obtained from the County Archaeological Officer. Such curatorial advice is also given by Historic England on Scheduled Monuments and other nationally important sites as well as on policy matters in general. Part of the role of curatorial archaeologists will be to maintain databases of information upon which management decisions can be made. Such staff are represented by the Association of Local Government Archaeological Officers (ALGAO).

4.7.2 The **Consultant Archaeologist** is an expert expected to give objective and independent advice to his client (often 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. Often this will involve the preparation of pre-planning submissions (see 4.7).

4.7.3 The **Contracting Archaeologist** is commissioned by the developer to carry out archaeological work to a brief set by, and then a specification agreed with the planning archaeologist and approved by the local planning authority. The results of the contractor's work should help the client to, either provides the local planning authority with sufficient information to progress a planning matter, or to determine a planning application, or to allow discharge of any relevant planning condition. The professional body for professional archaeologists is the Chartered Institute for Archaeologists (CifA).

4.8 Standard archaeological conditions for planning permissions

A set of model planning conditions for use throughout the County are available. In order to set a standard approach across Lincolnshire these conditions, or very similar conditions based upon these models will be used whenever possible: These conditions accord with current NPPF guidance.

4.8.1 SCHEME OF WORKS

Explanation: To be used where known archaeology is to be disturbed or where pre-planning work is not possible. This three part scheme of works condition is generic and can apply equally to any size of archaeological scheme, whether it is archaeological monitoring of a single house plot or full excavation for a larger residential scheme. This condition is also recommended for building recording. The exact requirements for any particular scheme will be stipulated in a brief which will normally be supplied by the planning archaeologist. In addition a scheme of works condition allows sufficient leeway for satisfactory recording when unexpected remains of national significance are identified. This type of condition should however be used with some caution. It should not be used to avoid the established procedure of desktop, field evaluation and field project.

“Part 1

No development shall take place until a written scheme of archaeological investigation has been submitted to and approved by the Local Planning Authority. This scheme should include the following and should be in accordance with the archaeological brief supplied by the Lincolnshire County Council Historic Environment advisor on behalf of the Local Planning Authority:

1. An assessment of significance and proposed mitigation strategy (i.e. preservation by record, preservation in situ or a mix of these elements).
2. A methodology and timetable of site investigation and recording
3. Provision for site analysis
4. Provision for publication and dissemination of analysis and records provision for archive deposition
5. Nomination of a competent person/organisation to undertake the work
6. The scheme to be in accordance with the Lincolnshire Archaeological Handbook.

Part 2

The archaeological site work shall be undertaken only in full accordance with the approved written scheme. The applicant will notify the planning authority of the intention to commence at least fourteen days before the start of archaeological work in order to facilitate adequate monitoring arrangements. No variation shall take place without prior consent of the local planning authority.

Part 3

A copy of the final report will be submitted within three months of the work to the Local Planning Authority for approval (or according to an agreed programme). The material and paper archive required as part of the written scheme of investigation

shall be deposited with an appropriate archive in accordance with guidelines published in The Lincolnshire Archaeological Handbook.

Reason: to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact and to make this evidence (and any archive generated) publicly accessible.

All archaeological work undertaken as part of this condition must meet recognised ClfA professional standards for implementation and archiving as required by the relevant planning archaeologist and museum archive.

It is the developers' responsibility to ensure that their contractor meets professional standards. Failure to do so could result in an inability to discharge this condition.

4.8.2 Preservation *in situ*

Explanation: NPPF recognises that historic assets are an irreplaceable resource. And it also states that the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.

This of course does not mean that because there are important heritage assets that a site cannot be developed; a strategy for mitigating potential damage to the heritage asset may be an option. Mitigation measures vary from site to site but may include re-design of layout and/or foundations and using open space allocations to preserve the most important areas of a heritage asset. It is important to take into account the impacts of construction on archaeological areas that have effectively been preserved-in-situ; this point is particularly applicable where development affects the water table. To preserve the setting of the asset it may be possible to create screening or bunding.

4.8.3 FENCING

Explanation: This condition could be used either to fence off an area where archaeological works are intended, or to fence off an area where preservation *in situ* is the preferred option.

"No development shall take place until a scheme for the fencing of the area identified in green on the attached plan has been submitted to and approved by the local planning authority. The scheme shall include details of the height, materials and

location of the fencing. The fencing shall be erected in accordance with the approved details, and shall be maintained in-situ until all equipment; machinery and surplus materials have been removed from the site".

Reason: To define the exact area of archaeological interest, and to protect it from unauthorised works during the development of the remainder of the site.

NB Condition requires a plan to be attached to the decision notice.

4.8.4 WATCHING BRIEF

Historically conditions requiring watching briefs have been used, however professionally it is recommended that these should be encompassed within a Scheme of Works as at 4.8.1 above

4.8.5 Building Recording

Explanation: Local Planning Authorities should consider in all cases of alteration or demolition, whether it would be appropriate to make it a condition of consent that applicants arrange suitable programmes of recording features that would be destroyed in the course of the works for which consent is being sought.

Building recording for significant Historic buildings is required prior to alteration or demolition. There are no specific conditions for this in current planning policy guidance, although the importance of such recording is stressed. A scheme of works condition (4.8.1) will allow for the satisfactory recording of buildings to the level required.

4.9 Refusal of planning permission

If any development proposals are deemed to have negative effects on nationally significant or locally significant historic assets the local planning authority will aim to preserve these in-situ. However, if this preservation cannot be guaranteed then the local planning authority may consider refusing planning permission. In reality there are few historic assets which are so sensitive that refusal on archaeological grounds, with appropriate mitigation strategies, cannot be overcome (see 5.10).

4.10 The role of the developer

By making the historic environment a material consideration within the planning process, NPPF places the responsibility for dealing with heritage assets with the developer. This means that prospective developers must consider and mitigate the effects of their development scheme on the historic environment as regards the settings of any historic assets or the impact of underlying remains.

Recommendations to the developer

- a) To seek pre-application discussions with the local planning authority.
- b) To be aware of the architectural, artistic, historical and archaeological interest of the development site, and to take account of the wider social, cultural, economic and environmental benefits of heritage conservation.
- c) To explore a range of alternatives for the buildings or site to be developed.

The effective preparation and presentation of the proposals will then be greatly assisted if the developer:

- a) provides the local planning authority with clear, detailed proposals;
- b) sets out a realistic timescale for the proposed development;
- c) demonstrates that the guidance in government policy has been followed;
- d) proposes an appropriate mitigation strategy for important heritage assets that could be destroyed if a consent is implemented;
- e) is prepared to enter into any related legal agreements necessary to implement the proposals.

The planning archaeologist will aid the developer in the achievement of these aims wherever possible.

It is considered that the developer's responsibility does not end until all fieldwork is completed, an appropriate report has been deposited with the HER, and the developer has deposited an appropriate archive (see section 17).

To this end the developer may wish to engage a consultant who can provide informed advice on heritage matters (see section 4.8). The consultant will be able to produce specifications for necessary archaeological work, advise on the importance of heritage assets and potential mitigation strategies as well as liaise with the planning archaeologist.

4.11 Environmental assessment

One specialised aspect of planning which is becoming increasingly important to archaeological resource managers is that of environmental assessment. The UK government originally published Environmental Assessment Regulations in 2005 in response to EC Directive 2003/35/EC. These were then updated and re-issued in 2011. In these it specifically mentions 'landscapes of historical, cultural or archaeological significance' and that these are sensitive to change and any effects of development on these must be considered within an EIA.

When describing site location, formation and topography, the historic landscape character of the site itself, and an appropriate buffer zone surrounding it, should be described using the Historic Landscape Characterisation dataset and reports held by the HER and the Local Planning Authority.

5. TYPES OF HISTORIC ENVIRONMENT WORK (v3.1)

5.1 Introduction

In this chapter the main elements of historic environment work, as they relate to the planning process, are described. These elements, normally phase 2 of the MoRPHE management model (see chapter 6), consist of both desk-based and field-based projects set in a context of the underlying principles of both preservation by record and contract archaeology.

5.2 Background

There are many types of historic environment work and it is essential that each of these is clearly defined.

5.2.1 Below are outlined the fundamental aspects of fieldwork and historic building recording. It is, by necessity, a summary of the variety of activities. Large projects may include a number of these tasks in combination and may run over several years.

5.2.2 With a view to saving resources, consideration should be given to combining evaluation with site investigations undertaken by architects, structural engineers and others as part of normal site analysis. Archaeologists may observe soil test pits or be given access to stratigraphical data.

5.3 Pre-application / Pre-determination

NPPF Section 16 para 189 requires applicants to provide enough information to the local planning authorities in their planning application about the significance of any historic assets that are affected during the proposed development, and that the level of detail should be proportionate to the importance of the heritage asset. NPPF states that **as a minimum** the Historic Environment Record should have been consulted and the heritage assets assessed using appropriate expertise.

We would advise that developers or their agents should speak to the planning archaeologist to ensure that the most appropriate pre-planning evaluation work is undertaken.

Where an application could potentially have archaeological interest local planning authorities should require developers to submit a desk based assessment and if appropriate field evaluation.

5.4 Appraisal

It is the role of the planning archaeologist to advise the local planning authority to assess development proposals for any archaeological implications. Every application for planning permission is subject to an **appraisal** (see Appendix 11) to determine whether further information is required. There are two types of appraisal: a simple appraisal is a rapid scan of the planning application to assess its potential for archaeological implications; a detailed appraisal involves checking the details of the application against known information, in most circumstances, the Historic Environment Record.

5.5 Desk-based assessment (desk-top study)

Desk based assessment consists of thorough research of all existing information (see Appendix 4 for an indicative list) without the requirement for any fieldwork. The CifA Standard and guidance for historic environment desk-based assessment (2014) states:

“Historic Environment Desk-Based Assessment will determine, as far as is reasonably possible from existing record, the nature, extent and significance of the historic environment within a specified area. Desk-based assessment will be undertaken using appropriate methods and practices which satisfy the stated aims of the project, and which comply with the *Code of Conduct* and other relevant regulations of CifA. In a development context desk-based assessment will establish the impact of the proposed development on the significance of the historic environment (or will identify the need for further evaluation to do so), and will enable reasoned proposals and decisions to be made whether to mitigate, offset or accept without further intervention that impact.”

CifA standards (2014)

5.6 Building appraisal, assessment and / or Statement of Significance

In order to determine any application to alter, demolish or convert a historic building it is reasonable to expect sufficient information in order to understand fully the impacts and implications of any proposals made on that building. The ALGAO advice document, Analysis and Recording for the Conservation and Control of Works to Historic Buildings (ALGAO 1997) defines appraisal and assessment as:

“An appraisal is a rapid inspection of the building, its listed description and relevant data held in any local records systems for historic buildings. Its

purpose is to identify whether clarifying the impact of proposed works or repair, alteration or demolition requires more information than is immediately available.”

“If appraisal identifies the need for more documentation, it can be obtained through a desk-top assessment. This is a thorough review of all existing information which aims to identify any gaps.”

ALGAO 1997

A **statement of significance** is a summary of heritage and cultural values attached to a building which distil the particular character of the place. It should explain the relative importance of heritage values, putting these values in a national, regional and local context, how these relate to physical historic fabric, the extent of uncertainty regarding hidden/buried elements and should identify tensions between conflicting values.

The result should guide decisions about material change to a significant place and impacts on its character. Often these might be written as stand-alone documents to advise local authority or government agency professionals, or may be produced in conjunction with a Heritage Impact Assessment which establishes the impact of specific proposals on the special interest of an historic building and its landscape, identifying ways of mitigating such impacts. These should always involve liaison with appropriate Conservation professionals' dependant on the context requirement for such Statements.

For further guidance on content and use please refer to 'Conservation Principles; Policies and Guidance' (2008).

5.7 **Evaluation (pre-determination)**

Evaluation can consist of non-intrusive and intrusive field evaluation techniques and often a mix of the two, in order to gather enough information to understand a site's archaeological potential. The CifA Standards and guidance for archaeological field evaluation states:

“Archaeological Field Evaluation will determine, as far as is reasonably possible, the nature of the archaeological resource within a specified project area using appropriate methods and practises. These will satisfy the stated aims on the project and comply with the *code of conduct* and other relevant regulations of CifA.”

CifA standards (2014)

5.8 Non-intrusive fieldwork (pre-determination)

Non-intrusive fieldwork is often done after a desk-top study in order to gather further information about a site. It can take a number of formats but usually most non-intrusive fieldwork will either be fieldwalking, geophysical survey, lidar, topographical survey or metal detecting survey. Not all of these will usually be employed at the same time; often it will be just one or two that will be used.

5.9 Intrusive fieldwork (pre-determination)

If the non-intrusive evaluation techniques suggest a potential for archaeology but do not provide enough information about form, significance or rarity it may be necessary to carry out an archaeological **field evaluation** prior to the determination of the planning application. Such work may also be undertaken as part of an environmental assessment and to satisfy the Scheduled Monument Consent requirements of the Secretary of State for Department of Culture Media and Sport. The emphasis will be on evaluating the likely impact of development upon the identified archaeological remains.

5.10 Mitigation Strategy

The combined information collected as a result of the procedures identified in sections 5.3 to 5.9 will enable the local planning authority to decide on an appropriate level of mitigation. The local planning authority will often expect the results of such work to be presented, for its approval, in the form of a mitigation strategy. Such a strategy will consider the impact of the development upon the archaeological resource and provide measures to maximise preservation *in situ* (see 4.9.2). The mitigation measures may include some level of preservation by record and the options are detailed in sections 5.11 to 5.15. Mitigation measures must result from careful consideration of the likely impact of the development upon all facets of the archaeological resource including structural, artefactual and environmental materials.

5.11 Post-determination

Where a site has a perceived archaeological potential, or where the mitigation strategy suggest some level of recording other that excavation is necessary, a Monitoring and Recording exercise may be appropriate. In the case of historic buildings a formal recording exercise may be required or a topographic survey in an area of earthworks. This work would normally be made a requirement of any planning application through a condition.

5.12 Scheme of Works (post-determination)

When a request for a scheme of works is made it could potentially mean a variety of different works. The exact type of work that is required by use of this wording should always be confirmed by the relevant planning archaeologist. **There should never be an attempt made by any third party to assume what work is required. The specific requirements of any archaeological project may be outlined in an accompanying brief.** If there is any doubt please contact the appropriate Planning Archaeologist.

Often a Scheme of Works condition will be used when a **Scheme of Monitoring and Recording** is required. This entails the appointed archaeologist watching all groundworks on a site in order to record any archaeological remains which may be disturbed. Allowances should also be made to allow the archaeologist sufficient time to record any archaeological finds and features on site.

A topsoil strip, map and sample, or strip map and plan, is a rapid assessment which determines the presence or absence of archaeological remains, usually across large areas. This entails the machine stripping of the soil under archaeological control until the archaeological horizon is reached, or as defined in the archaeological brief and/or agreed with the relevant archaeological curator. Any archaeological features are then recorded in plan and sampled by partial excavation in order to determine their date, function and importance. Dependant on the results this may be immediately followed by targeted archaeological monitoring.

Building Recording

The archaeological recording of architectural structures has become increasingly valuable. NPPF recognises the positive contribution of such heritage assets to local character and that sense of place is recognised and valued. It also recognises that keeping heritage assets in use avoids the consumption of building materials and energy and the generation of waste from the construction of replacement buildings. This increases the importance placed upon the recording of architectural fabric under threat of alteration or demolition. The CifA Standard and guidance for the archaeological investigation and recording of standing buildings or structures states:

'A programme of archaeological building investigation and recording will determine, as far as possible, the nature of the archaeological resource associated with a specified building, structure or complex. It will draw on existing records (both archaeological and historic 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, and

other relevant regulations and by-laws of CifA. The programme will result in the production of drawings, an ordered accessible archive and report. '

CifA Standards 2019

A guidance document has been prepared by the Association of Local Government Archaeological Officers (ALGAO 1997).

Building recording can take many forms dependant on the needs of each structure. This can be as simple as a photographic record to a full hand-surveyed brick by brick recording. It should be noted that although Historic England guidance (*Understanding Historic Buildings: A guide to good recording practice* Historic England 2016) regarding building recording levels are very informative they are not routinely used by Lincolnshire County Council. A specific recording scheme appropriate to the needs of each individual structure/building will be outlined in the brief (chapter 8).

5.13 Topographic Survey

Topographic survey will be used when a site has earthwork features that need to be recorded before they are destroyed. Topographic survey is the measurement of the surface features and configuration of an area or a region, and the graphic expression of those features. Surveying is the art and science of measurement of points on, above, or under the surface of the Earth. Topographic maps show the natural and cultural features of a piece of land. The natural features include configuration (relief), hydrography, and vegetation. The cultural features include roads, buildings, bridges, political boundaries, and the sectional breakdown of the land.

5.14 Excavation/preservation by record (post determination)

Archaeological projects are many and varied. Different developments have different effects upon the archaeological resource and projects will need to be tailored to these varying conditions. In exceptional circumstances the local planning authority may accept that the only suitable option is to preserve by record, that is, to sample by full-scale excavation prior to the development commencing. Full excavation of archaeological remains is an option of last resort where no scheme for preservation *in situ* can be arranged. As this happens very rarely, each project will be dealt with on its own merits and be subject to its own archaeological management practice. The CifA Standard and guidance for archaeological excavation states:

“Archaeological Excavation is defined as a programme of controlled, intrusive fieldwork with defined research objectives which examines and records 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 objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the Project Design and in the light of findings.”

CIfA Definition of excavation (2014)

5.15 Environmental Sampling

Environmental archaeology is the study of past human economy and environment using earth and life sciences. It tells us about ecological cultural, economic and climate change.

Environmental sampling is part of the process of recognising and recovering archaeological materials and information from the site. A suitable sampling strategy should be formed for every evaluation. This should be dependant on;

- a) The identified research aims (as defined in the project design).
- b) The likely presence of particular environmental remains.

Sampling should not be confined to features which can be dated in the field, but also to features which are essentially undated during their excavation. The environmental information may be such that it can date these features. It also can help to ensure that the maximum information can be gleaned from evaluations and excavations.

5.16 Guidance for large schemes including NSIPs and EIAs, General Scoping Opinion for the Historic Environment

Cultural Heritage should be ‘scoped in’ and appropriate assessments included as part of the Environmental Statement. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 states ***“The EIA must identify, describe and assess in an appropriate manner...the direct and indirect significant impacts of the proposed development on...material assets, cultural heritage and the landscape.”*** (Regulation 5 (2d)).

Potential for Impact on archaeology

Developmental impact for solar farms includes tens of thousands of piles, cable trenching, associated infrastructure and mitigation measures such as scrapes and wildlife ponds, all of which could disturb and destroy surviving archaeology. There is potential for compaction during construction and decommissioning while through the lifetime of the scheme there will be refits which involve ripping out the old infrastructure and putting in new.

In archaeological terms we as a profession are coming to realise that solar schemes are at least as damaging to archaeology as housing developments.

Full impact zone

The full extent of the proposed development area, including the connector route corridors, will need to undertake sufficient evaluation to allow for a programme of suitable mitigation.

Archaeological impacts and subsequent mitigation have the potential for significant financial and scheduling impacts. Sufficient evaluation is therefore essential in informing the selection process and in ensuring the subsequent design and work programme is devised with an understanding of the level of archaeological work which may be required before and during the construction phase.

Search requirements

Archaeological evaluation will be undertaken as part of the assessment process, details and intended scheduling should be provided at the earliest opportunity and more specific information will be required going forward.

HER data for a 2km radius is required from the redline boundary and including any proposed options. Until they are descope all cable route options need to be properly assessed as part of the development and as part of the Environmental Statement (ES).

All designated assets (ie. Scheduled Monuments and Listed Buildings) within a 5km radius should be taken into account for setting assessments. The significance of each asset must be assessed prior to scoping which assets would be affected. Modelling should particularly include any identified assets which have the potential to be visible or have their setting affected by the taller elements of the development.

Requirements for sufficient evaluation

It's vital that a competent full desk based assessment (DBA) be completed at the earliest opportunity as desk based work provides the basis for initial understanding. This is informed by and built upon by a full air photo/LiDAR assessment and geophysical survey which in turn assists in the development of the trial trenching programme. The results of all the evaluation phases are required to form the baseline evidence and allow for sufficient understanding of the archaeological potential across the scheme. The evaluation work must be completed in time to inform the mitigation strategy which will lay out how the developmental impact on archaeology will be dealt with, therefore this will need to be submitted as part of the EIA.

Desk based assessment (DBA)

A desk based assessment must be submitted prior to the trenching WSI as it is required to inform an effective evaluation strategy. The DBA should include all reasonably available desk based information for the full extent of all proposed impact areas including any cable or connector routes.

Desk based sources should include full LiDAR and air photo coverage and assessment (details below); archaeological reports; Portable Antiquities Scheme (PAS) data and local sources and archives.

Map regression should include all available maps to provide a reasonable understanding of the development and time depth of the sites.

LiDAR and air photo assessment

A full competent LiDAR and air photo analysis, interpretation and assessment is required with full aerial photo coverage using all available oblique and vertical air photos including the Historic England Archive and Cambridge University Collection of Air Photos as well as RAF and Ordnance Survey photos including those held by Lincolnshire County Council.

Geophysical Survey

A geophysical survey must be undertaken of the main development site and all potential cable connector routes until they have been selected or descoped.

The results are required to identify site-specific archaeological potential and to inform a programme of archaeological trial trenching and subsequent mitigation. Pre-determination evaluation of the cable connection corridors can be very useful with informing a decision on the most cost effective and viable route.

Regarding the geophysical survey a single Written Scheme of Investigation should be prepared that all contractors adhere to. This must include appropriate quality and control measures to ensure consistency of data recovery across the site.

In the event of multiple contractors separate reports for each contractor should be supplied in full and the consultant will supply a comprehensive and robust overarching report presenting the combined results as this will inform the subsequent evaluation trenching.

Trial trenching

Trial trenching is required as trenching results are essential for effective risk management, project management, programme scheduling and budget management. Failing to do so could lead to unnecessary destruction of heritage assets, potential programme delays and excessive cost increases that could otherwise be avoided.

Curators across the country are on a steep learning curve regarding the extent of the impact across these schemes as the specific impacts across the redline boundary are not included in the submission documents. It's clear to us now that 1% or 2% trenching isn't sufficient to

undertake an adequate assessment and this has informed the emerging regional guidance requiring 3 – 5% trenching while understanding that this percentage will mean that significant archaeology is lost.

As well as targeting known and potential archaeology the trenching strategy will need to target those areas where earlier evaluation phases have not been successful in locating archaeology. Targeting blank areas is an essential part of determining the archaeological potential across a proposed development as different types of archaeology and geology may limit or mask the effectiveness of non-intrusive evaluation techniques.

Sufficient trenching will be required across the full impact zone to determine the presence, absence, significance, the depth and extent of any archaeological remains which could be impacted by the development.

The results of trial trenching will inform a robust mitigation strategy which will need to be agreed by the time the Environmental Statement is produced and submitted with the Development Consent Order (DCO) application.

Settings Assessment

Regarding a competent Settings Assessment, the application site may affect the setting of several Scheduled Monuments as well as a large number of designated and non-designated heritage assets. The Settings Assessment/Heritage Impact Assessment needs to begin from an understanding of the significance of each of those assets in order to assess the potential impact of the development on them and put forward any potential benefit or mitigation of proposed negative impact.

Environmental Impact Assessment

The EIA will require the full suite of comprehensive desk-based research, non-intrusive surveys, and intrusive field evaluation for the full extent of proposed impact. The results should be used to minimise the impact on the historic environment through informing the project design and an appropriate programme of archaeological mitigation. The provision of sufficient baseline information to identify and assess the impact on known and potential heritage assets is required by **Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (Regulation 5 (2d))**, **National Planning Statement Policy EN1 (Section 5.8)**, and the **National Planning Policy Framework**.

Sufficient information on the archaeological potential must include evidential information on the depth, extent and significance of the archaeological deposits which will be impacted by the development. The results will inform a fit for purpose mitigation strategy which will identify

what measures are to be taken to minimise or adequately record the impact of the proposal on archaeological remains which must be submitted with the EIA.

This is in accordance with The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 which states ***"The EIA must identify, describe and assess in an appropriate manner...the direct and indirect significant impacts of the proposed development on...material assets, cultural heritage and the landscape."*** (Regulation 5 (2d))

Please note that the **Historic England Regional Science Advisor** should be consulted on the project as well as providing advice on geoarchaeological assessment.

6. HISTORIC ENVIRONMENT PROJECT MANAGEMENT v2.3

6.1 Introduction

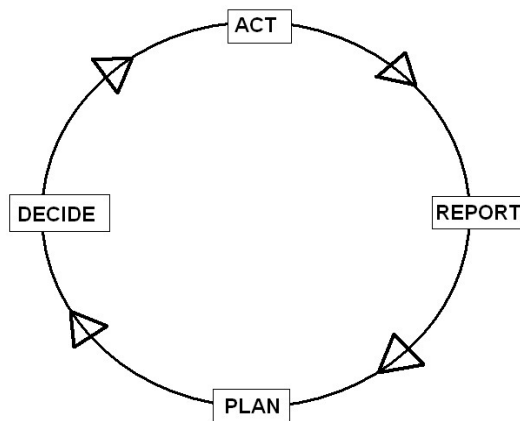
This chapter takes an overview of the management of historic environment projects. As mentioned in the previous chapter, these may arise when the need for further information to determine a planning application arises or, when preservation is to be by record. To maximise the effectiveness of any project a suitable management framework should be in place before its commencement. This will ensure the effective discharge of the approved scheme of works.

6.2 Background

When an applicant is required to provide further information in support of a planning application, or if the option of preservation *in situ* is not applicable, a historic environment project will follow. Set out in this document are guidelines which aim to make such a project as effective as possible and have been derived from national guidance. (Chapter 7)

6.3 Historic England guidance MoRPHE

Historic England has produced a model for good project management. Until 2006 that model was known as MAP2 this has now been superseded by “The Management of Research Projects in the Historic Environment” or “MoRPHE”. MoRPHE is a guideline document which aims to assist in the management of basic or applied research and development projects undertaken by English Heritage. This document identifies a four stage process for archaeological project management and introduces the idea of a cyclical review process for each phase. Each stage should be subject to the following cycle of continuous review. MoRPHE has produced separate guidance or Project Planning Notes for various different archaeological projects, including; Desk-Based Assessments, Archaeological Survey, Geophysical Survey, Archaeological Excavation or Historic Building Recording Projects.



6.4 Staged management model

The English Heritage four stage model for the management of research projects consists of:

Stage 1	Start Up
Stage 2	Initiation
Stage 3	Execution stages (planned stages for each project are documented in the project design)
Stage 4	Closure

These stages are detailed below. As far as is reasonably possible, archaeological projects in Lincolnshire should be managed following this framework. It is recommended in MoRPHE that within each stage of the project the cycle of continuous review should be considered. A generic model for archaeological projects is in appendix 3.

6.5 Stage 1 Start Up

At this stage the initial aims and objectives for the project are established. In threat-led research a Brief will be issued by the appropriate curator and a specification/project design will be submitted by contracting archaeologists.

6.6 Stage 2 Initiation

This is the main planning stage; the emphasis here is on wide consultation with appropriate specialists to ensure that the maximum research benefit is derived from the excavation, and that the arrangements for archive storage are made in outline. The Project Design is the major product of this stage.

6.7 **Stage 3 Execution stages**

The planned stages for each project should be documented in the Project Design. Archaeological excavation encompasses an ever increasing variety of activities and techniques with different types of projects having different means of collecting data. What each project will share, however, is a number of key stages: data collection and assessment; analysis; understanding; dissemination and archive deposition. Each of these stages will contribute to the site and research archives, and each of these must be subject to continual assessment and review, which is vital to the successful achievement of each stage and the project as a whole.

6.8 **Closure**

Controlled Closure ensures that a project has a defined and agreed end-point. The project will be formally closed after it has been ensured that all agreed work as given in the Project Design, or updated Project Design, has been completed. A final report should also be compiled.

MoRPHE also recommends other requirements in its closure stage.

6.9 **Applying the management model**

As far as is practicable this process should be applied to every archaeological project although in some circumstances such an approach will be more useful than others. It is considered that the recommendations of MoRPHE, particularly relating to continuous review, are good project management practice. Decisions to proceed through successive stages should be informed by intelligence emerging from the previous stages. While the detail of the process is not necessarily applicable to every project, the end result should be as suggested in MoRPHE. To this end, every project will result in a final report (to enter the public domain) and an ordered archive in suitable long-term storage.

6.10 **Professional standards and funding**

With the publication of PPG16 and PPG15 in the 1990s, PPS 5 in 2010 and the NPPF in 2012, 2018 and 2019 the value of the historic environment and the contribution it makes to our cultural, social and economic life is recognised and dealing with historic environment, through whichever means has become one of the legitimate costs of development. Statutory requirements for planners are set out in, amongst others, the Town and County Planning Act 1990.

- 6.10.1 The professional body for archaeologists is the Chartered Institute for Archaeologists (CifA) whose members agree to abide by its Code of Conduct and other by-laws.
- 6.10.2 The Association of Local Government Archaeological Officers UK (ALGAO- UK) provides a forum which represents archaeologists working for local authorities and national parks. Its membership consists of senior professional archaeologists employed by local authorities to provide advice on archaeological conservation and management.
- 6.10.3 The Institute of Historic Building Conservation (IHBC) is the principal body in the United Kingdom representing professionals and specialists involved in Historic Environment Conservation.

PART 2

ARCHAEOLOGICAL CODE OF PRACTICE

7. ORGANISATION OF HISTORIC ENVIRONMENT PROJECTS (v3.1)

7.1 Introduction

The NPPF places the responsibility for dealing with heritage assets affected by development proposals with the developer. Local planning authorities will need to be assured by those applying for planning permission that any such remains are not under threat. As a result developers are required to produce a definitive method of mitigating the effect of development on the historic environment within the planning process. In Lincolnshire planning archaeologists will produce an appropriate level of guidance to aid developers in the fulfilment of their archaeological responsibilities.

7.2 The brief

In the majority of cases an historic environment brief or outline of required work will be produced by a planning archaeologist with reference to this manual. The brief sets out the basic requirements of the project and the standards which are to be adhered to while it is being undertaken. The brief will contain sufficient detail for the developer to use the document to initiate a tendering process. The specifications, or written project designs produced on behalf of the developer must then be reviewed by the planning archaeologist, acting on behalf of the local planning authority. This will ensure that the proposals fully meet the requirements set in the brief. Any documents not deemed to fulfil the brief will be identified to the developer and rejected. Any contractors who do not have a continued proven record of archive deposition may not have their specification approved.

7.3 The specification

The responsibility of the developer is to commission an archaeological specification, or project design from an archaeological contractor. The archaeological contractor will need to be aware when negotiating with the planning archaeologist and/or giving advice to their client of their dual responsibility, the archaeologist will be considered to be acting in a consultancy role. The consultant should discuss the detail of the specification and or mitigation strategy with the planning archaeologist during its production, and must present a final submission, in writing, for approval to the planning archaeologist acting on behalf of the planning authority. This document should put forward suitable methodologies and intended timescales.

7.4 Mitigation strategy

A Mitigation Strategy is a statement as to how the developer intends to mitigate the effects of proposed development on any underlying or upstanding archaeological/historic features. These may involve the production of a Statement of Significance and/or a Heritage Assessment. The strategy should describe the methodology for mitigation by preservation or recording. The strategy might provide for preservation in situ of any archaeological remains, either by designing a scheme which leaves a particular significant area undeveloped (such as a green space) or by designing shallow foundations which might override sensitive remains. On the other hand it may provide for recording archaeological remains prior to destruction by the development; such strategies would normally be accompanied by the submission of a programme of archaeological works. These should always be produced in consultation with the appropriate local authority planning archaeologist.

8. THE BRIEF (v2.3)

8.1 Introduction

This chapter details the expected contents of the project brief. Such a document will normally be set by the planning archaeologist for the benefit of the developer and contracting archaeologists and should inform them of the requirements of the planning authority.

8.2 Project planning

As MoRPHE (English Heritage 2006) states, good project management depends upon thorough planning, see chapter 6 above. The ClfA Standard (2015 a-d) recommends that:

“However it arises an archaeologist should only undertake a [field evaluation, watching brief, ABIR or any other fieldwork] which is governed by a written specification (WSI) or project design ... agreed by all relevant parties, as this is the tool against which performance, fitness for purpose, and hence achievement of standards, can be measured.”

and

“The WSI or project design is therefore of critical importance.”

The planning stage of any archaeological project is a key element in its success and should entail discussion with all relevant parties and must involve an input from finds, conservation, environmental and other specialists. For the purposes of archaeological project management, and in line with industry good practice, it is assumed that **briefs** are issued by those requiring work to be carried out, whilst **specifications** can be either a response to a brief or may be initiated as part of a research proposal. The **specification** or **project design**, produced by a contractor, will be the agreed specification of works approved by the local planning authority that will be implemented and monitored.

The brief should be used by archaeological consultants as the basis for the preparation of a detailed archaeological specification. A brief should be based upon existing knowledge of the county, current research policies and database information and will be tailored to the particular development issue. The planning archaeologist will always be available to discuss requirements of a brief with those preparing a specification or project design.

8.3 **Summary of the contents of a brief**

Included in this section is the anticipated standard content of a brief. For most elements of a brief reference should be made to this document. However, it will still be necessary for the planning archaeologist to set requirements that are unique to a given archaeological project. Such details as site location, planning background and likely development impact will vary from project to project. It is essential that the following paragraphs are read in conjunction with the planning archaeologist's brief which should establish the parameters of the particular project.

8.4 **The contents of a brief**

8.4.1 **Notes for the applicant.**

An explanation of the purpose and remit of the archaeological brief set out in plain language.

8.4.2 **Useful notes for the archaeological contractor or consultant.**

An explanation of the requirements to which any subsequent specification should be prepared.

8.4.3 **Summary of brief**

This will summarise the contents of the brief in plain language.

8.4.4 **Site location and description**

The developer should provide a site location; if an application has been submitted to the local planning authority a site location plan will usually be available on the relevant district planning website. The brief should contain details of site or area geology if appropriate, land-use, vegetation, soils and altitude. It should also contain details of the current land use. Reference might also be made to other physical constraints such as underground services and overhead lines.

8.4.5 **Planning background**

The brief should outline the planning issue, i.e. the type of application and the nature of development. There should also be an indication of other known planning

constraints worthy of consideration where they have a bearing on the archaeological work, e.g. Scheduled Monument, Conservation Area, Area of Outstanding Natural Beauty, Site of Special Scientific Interest, Listed Building, Tree Preservation Orders, etc.

8.4.6 **Archaeological and historical background**

A short summary of the information gained from the appraisal of the development, usually taken from the HER but possibly other sources and a site visit if appropriate. (See Appendix 5 for potential data sources).

8.4.7 **Requirement for work**

Outline of the type of desk-based research and/or fieldwork that is to be undertaken and what is expected of the results, with reference to relevant sections of this document (particularly Section 5). This should be set within appropriate national, regional and local frameworks.

8.4.8 **Methodology**

Refer to this document (see chapter 10, 11, 12 and 13) unless there are any particular considerations to note.

8.4.9 **Health and Safety**

All work should be carried out in a way that complies fully with the Health and Safety at Work Act 1974.

8.4.10 **Finds**

All finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition).

8.4.11 **Standards**

Archaeological contractors should note that the Lincolnshire Archaeological Handbook stipulates basic *methodological* standards. It is considered axiomatic that all contractors will strive to achieve the highest possible *qualitative* standards, with the application of the most advanced and appropriate techniques possible within a

context of continuous improvement aimed at maximising the recovery of archaeological data and contributing to the development of a greater understanding of Lincolnshire's historic environment. All work should be undertaken to CifA standards.

8.4.12 Reporting requirements

Refer to this document (see chapter 15) unless there are any particular considerations to note.

8.4.13 Archive deposition

It is necessary to include an expected archive deposition date, this should be applied for at the same time as the museum accession code and site code (see the museum deposition of archaeological archives request form (chapter 17)). This is a compulsory requirement in the specification. It should be noted that the planning archaeologist will not recommend the discharge of any planning conditions until they have approved the report and the archive has been deposited. Refer to this document (see chapters 13 and 17).

8.4.14 Publication and dissemination

Refer to this document (see chapter 16).

8.4.15 Monitoring arrangements

Refer to this document (see chapter 18) but state who will be undertaking the monitoring and on whose behalf. The frequency of monitoring visits and their purpose should also be stated.

8.4.16 Other factors (including contingency)

There may be a potential for complex and unexpected archaeology, which then could require further work for conservation and analysis, for which the brief must contain a contingency.

8.5 Default

All briefs produced by Historic Environment Team, Lincolnshire County Council will refer in detail to this document as a default unless the content of the brief specifies otherwise.

9. SPECIFICATION AND PROJECT DESIGN (v2.3)

9.1 Introduction

This chapter details the expected contents of a specification or project design. This will normally be produced in response to a brief or project outline and will be submitted to the relevant planning archaeologist for approval on behalf of the local planning authority. In most circumstances the specification will be produced by a consultant acting on behalf of the developer. In order that the planning archaeologist will have sufficient time to ensure the suitability of the specification, and also to allow time to arrange any required monitoring of the subsequent works, the specification should be submitted at least ten working days prior to the intended start date of works. The specification should be provided in an appropriate readable format, ideally as a single PDF copy.

9.2 Background to a specification/project design

The specification should address the issues raised within the brief/project outline. It should provide sufficient detail to indicate exactly how information will be gained for planning purposes. In preparing the specification it should be borne in mind the need for minimum archaeological intervention and for work to be carried out in the most cost-effective way. In section 9.4, below, are the sections which will normally be expected within a specification.

9.3 General contracting arrangements

In addition to the detail required of a specification as laid out in section 9.4 the planning archaeologist will need to be assured of the suitability of the contracting unit. To this end, if not already known, a list of key personnel must be supplied to the planning archaeologist along with details of their relevant experience and a *curriculum vita* for each specialist member of staff, if appropriate. This will be particularly necessary for those contracting units who have not already provided the relevant information on earlier occasions.

9.4 The contents of a specification

During the production of the specification specialists should be consulted. The specification should consist of the following sections.

9.4.1 Title page

This should include the site name, address and national grid reference, the client's name, the date (month and year) and the contractor's name. Note the approved project design should include the site code and museum accession number.

9.4.2 Non-technical summary

This section should be an overview of the contents of the specification in plain language.

9.4.3 Site location and description

The specification/project design should contain a site plan (1:10000 scale or larger) and a location plan (1:50000 or 1:25000) as well as the OS national grid reference. The site grid must be tied into the national grid. Details of site or area geology, land-use, altitude, soils and vegetation should also be given, as well as any physical constraint on the proposed works.

9.4.4 Planning background

The specification/project design should outline the planning issue, in particular the stage within the planning process and the nature of the development. There should also be an indication of any planning constraints worthy of consideration, e.g. Scheduled Monument, Conservation Area, Area of Outstanding Natural Beauty, Site of Special Scientific Interest, Listed Building, Tree Preservation Order, etc.

9.4.5 Archaeological and historical background

The specification/project design must contain a summary of the known archaeological information relating to the site and its vicinity. This should contain data from the county HER, any previous research (e.g. a desk-based assessment) and other relevant sources (see Appendix 4).

9.4.6 **Aims and objectives of the project**

In response to the brief's requirements for work, every archaeological project should have a clear statement of objectives. This should be set within the appropriate archaeological national, regional and local frameworks.

9.4.7 **Methodology**

The specification will be expected to contain a reasoned discussion of the field and analytical techniques selected (see Chapter 11 below). Details must be given of techniques, artefact collection policies, discard policies, environmental sampling strategy and recording techniques. The rejection of a technique should be explained. The inclusion of the details below should be considered the minima in a contractor's specification.

- a) An agreed projected timetable for the various stages of work (fieldwork and production of report and archive).
- b) Details of the staff structure and numbers.
- c) Compliance with the relevant Health and Safety legislation and due consideration of site security.
- d) A full description of the recovery and recording strategies to be used.
- e) A programme of investigation that provides a sound basis for developing the archaeological scientific component within the specification for any subsequent mitigation strategy.
- f) An estimate of time and resources allocated for the post excavation work and report production. This should include lists of specialists and their role in the project. It is expected that finds will be encountered and therefore adequate provision should be made for specialists in these areas. If the specialists to be used are not CifA registered and are not locally recognised, a CV or other form of reference should be provided with the specification. There should be no change to any of the specialists listed in the specification unless previously discussed with the planning archaeologist.

9.4.8 **Post-fieldwork methodology**

The specification should contain an explanation of the proposed post-fieldwork techniques to be utilised. Details must include cleaning, conservation, cataloguing, packaging, dating techniques and archive preparation. For environmental samples the proposed methods of processing and storage should also be given. Where used, specialists are to be listed.

There should also be a disposal and retention policy: dependant on the quantity and significance of finds it may be necessary to appoint a specialist to produce a report on the disposal rational for a project and consult with the museum in advance of archive deposition.

9.4.9 **Monitoring arrangements**

The proposals for monitoring by the relevant planning authority, usually represented by the planning archaeologist, should be reiterated from that set out in the brief. Also details of internal and contractual monitoring should be given (see Chapter 18 below).

9.4.10 **Archive preparation and deposition**

The specification should include an indication of the level and format of the archive to be produced. Please note that it is vital that the integrity of the site archive should be maintained. All finds and records should preferably be properly curated by a single organisation, and be available for public consultation, although with increased digital archives it will not always be possible to keep the archive in one place. The specification should also state where it is proposed to archive different parts of the record if it is not to be curated by a single organisation. The archive should be deposited within six months of the completed project. So that the progress of the project; including the final stage of archiving, can be effectively monitored it will now be necessary to include an expected archive deposition date, this should be applied for at the same time as the museum accession code and site code (see The museum deposition of archaeological archives request form (chapter 17 appendix B)). This will be compulsory requirement in the specification for approval. If an agreed deposition date is missed then the relevant development control curator will be notified.

The archive consists of all written records and materials recovered, drawn and photographic records, including a single copy of the final report. It will be quantified, ordered, indexed and internally consistent. It should also contain site matrices, a site summary and brief written observations on the artefactual and environmental data.

An accession number must be drawn prior to the commencement of archaeological works and an expected archive date or deposition window should be included in the specification.

It should be noted that the planning archaeologist will not recommend the discharge of any planning conditions until they have approved the report and the archive has been deposited.

If the receiving museum is to be The Collection, Lincoln then the archive should be produced in the form outlined in that museum's document 'Conditions for the Acceptance of Project Archives', Chapter 17 in the Lincolnshire Archaeological Handbook.

9.4.11 **Digital Archiving**

Digital archiving should be done in full accordance with current Cifa guidance (2019) and a Data/Digital Management Plan should be included in the specification.

The Digital Archive should only be deposited with a Trusted Digital repository which must have a Core Trust Seal status.

<https://www.coretrustseal.org/why-certification/certified-repositories/>

The location of the digital archive/web address should be included in the final report

9.4.12 **Reporting procedures**

The specification should outline the proposed reporting procedure and the likely timetable, as well as the anticipated content of the final and any other reports (see Chapter 15 below).

9.4.13 **Publication and dissemination**

It is important that results of archaeological investigation reaches the public domain and this matter should be addressed within the specification (see Chapter 16 below).

9.4.14 **Other factors (including contingency)**

It will be necessary to provide contingency arrangements, particularly for unexpected discoveries, as requested in the brief. The specification should provide recognition of the procedures laid down to initiate any contingency plans (see chapter 19). Other matters to note may include details not mentioned elsewhere in the specification, contact addresses, etc.

9.4.15 **Resources**

Issues of timetabling and staffing, particularly expertise, will be necessary for the planning archaeologist assess the suitability of the response proposed. Funding matters are not relevant to the planning archaeologist and are best dealt with separately from the main body of the project design.

9.4.16 **Insurance statement**

The specification should contain details of the required insurance cover (see section 11.8 below).

9.4.17 **Copyright**

The specification will need to verify that agreement has taken place over the ownership of the archive and the copyright procedures for the documentary element see 11.9 below.

9.5 **Default**

It is expected that all specifications will refer to the detail in this document as a default where there is uncertainty unless a specification particularly states otherwise.

10 ARCHAEOLOGICAL METHODOLOGY (v2.4)

10.1 Introduction

The next major consideration in project design is the selection of field techniques and the anticipated method of on-site working. The following is a summary of matters to be borne in mind when undertaking a project. Some of these are relevant only to one form of historic environment work whereas others may apply to a number of different types of historic environment project.

10.2 Background

Those undertaking historic environment projects have an obligation to carry out that project to a professional standard. This standard ensures that sufficient information is provided by the project for planning purposes and that reporting and archiving meet the requirements of the receiving HER and museum. Guidance on standards of historic environment work has been issued by various bodies including Historic England, ADS and the CifA.

10.3 Site Location

All historic environment fieldwork must be subject to adequate horizontal and vertical survey control. The location of the grid will be established, relative to the OS national grid. In most instances it will be expected that control points and trenches will be surveyed using an EDM or GPS (Global Positioning System). The GPS equipment which is use should be accurate to the sub-centimetre level (differential GPS). The vertical survey control will be tied to the Ordnance Datum. The accuracy must be of a level to allow the work to be repeated by a third party.

10.4 Consideration of Techniques

When preparing a project design, and/or specification, account must be taken of the local geology, topography and land-use as it affects the feasibility of the various techniques. Consideration should be given to additional aerial survey, lidar, field-walking, earthwork survey, geophysical survey and the observation of geotechnical test-pits (if appropriate), as well as the undertaking of archaeological test-pits, as possible field evaluation techniques.

10.5 Earthwork Survey

Earthwork surveys may form part of a pre-determination evaluation or a post-determination mitigation strategy. They should not normally be carried out at a scale less than 1:500 and will normally be a hachured survey although a contour survey may occasionally be required.

10.6 Fieldwalking

Fieldwalking is essentially a technique used for prospection during the field evaluation of a rural site. Such a reconnaissance survey can be carried out on transects spaced 10 to 20m apart. Surface material can also be collected to give a more detailed indication of likely buried remains at a finer scale. Both levels of fieldwalking should only be carried out in conditions of suitable ground visibility which would normally be after the land has been ploughed, harrowed and left to weather for an appropriate length of time.

10.7 Geophysical Survey

Geophysical survey should be only be undertaken by appropriately qualified and experienced practitioners. When geophysical survey is recommended as a potentially useful evaluation technique it is done with the proviso that the site will be assessed for suitability by the geophysicist.

An archaeological specification for the geophysical survey will be required in advance of work and should be subject to approval of the planning archaeologist.

The specification should include a justification statement on which type of geophysical survey is proposed and why and include details of the advantages and limitations of that survey. E.g. why has a magnetometer been used instead of resistivity or ground penetrating radar? The technique used should always be informed by the type of geology and archaeology anticipated based on the information based on available information. The justification should be results based not a costs based. If a client has insisted on the lowest cost survey (for cost reasons) they should be advised that the results may not be as conclusive as another type of survey and that either further geophysics, using an alternative method or more a more intensive evaluation phase may be required.

The final report should also include the justification statements and a statement on the sites ground conditions and if any adjustments have been made to the equipment settings in order to compensate for example; particularly wet or dry conditions.

The report needs to include raw and unclipped data in both greyscale and x y trace plots.

The data should only be minimally processed and that all processing techniques should be accompanied by a full justification statement. And what if any potential archaeological data might be lost or minimised as a result of this processing.

The excessive use of de-stripe can be the indication of poorly calibrated equipment and every effort should be made to reduce the instrument directional sensitivity in the field rather than reliance on post data-collection processing.

The specification, works and final report should be fully compliant with current CifA guidance, EAC Guidelines for the Use of Geophysics in Archaeology 2015 and Historic England guidance 2016a.

10.8 Environmental Evidence

Environmental evidence is a necessary and potentially important element of the archaeological record. During a field evaluation an accurate assessment of the preservation of environmental evidence, including animal bone, shell, waterlogged and charred organic remains, and the condition of any buried soils and sediments should be made. This assessment should be sufficiently comprehensive to allow an evaluation of its potential archaeological relevance and to enable the construction of a structured sampling strategy and post-excavation programme, should the evaluation go to the full excavation stage. When undertaking this work advice must be sought from an appropriate environmental consultant or from Historic England specialists. Environmental sampling should be undertaken according to current Historic England guidance (English Heritage, 2011).

10.9 Trial Excavation

Excavation is a potentially destructive evaluation technique and, where possible attempts must be made to maximise data retrieval from non-destructive techniques before undertaking excavation. However, should trial excavation be required the specification should include a detailed reasoning for the application of the technique.

10.9.1 Whether excavation is being undertaken as part of a pre-determination evaluation or as part of a mitigation strategy the following factors should be borne in mind:

- a) all machine work should be supervised by an experienced archaeologist;
- b) machining should stop at the first archaeological horizon;

- c) the use of an appropriate machine with a wide, toothless ditching blade, when archaeological features are revealed these will be cleaned by hand;
- d) a representative sample (as agreed with the planning archaeologist) of every archaeological feature must be excavated by hand (although the depth of surviving deposits must be determined, it is not expected that every trench will be excavated to natural);
- e) adequate recovery of finds and an appropriate sampling programme to provide environmental evidence from all archaeological deposits should be ensured. A site visit by the nominated environmental specialist may be required;
- f) where appropriate, a level of science advice either from the Historic England Regional Scientific Advisor or an appropriate specialist should be sought;
- g) If human remains are encountered these would normally be left in-situ.

10.9.2 It is expected that an acceptable recording system will be used for all on-site and post fieldwork procedures (see chapter 12). The recording procedure must take into account the long-term archival requirements of archaeological records. Due attention must be given to the drawn and photographic record. Both artefacts and ecofacts must be handled according to the requirements of the document *Conditions for the acceptance of archaeological archives* (produced by The Collection, Lincoln and reproduced here as Chapter 17). **Prior to fieldwork commencing discussions should take place with The Collection, or any other receiving museum regarding archive deposition. At this time an accession number will be issued and should be used throughout the project.**

10.9.3 All faces of the trench which require examination should be cleaned using hand tools. All investigation of archaeological deposits will be by hand. Cleaning, examination and recording should take place in both plan and section.

10.9.4 The objective of any excavation within a field evaluation programme should be to define remains rather than totally remove them. Excavation should normally be limited to the minimum necessary to characterise the value or potential of the remains.

10.9.5 As well as the excavation or sampling of archaeological features it may be necessary to examine naturally deposited material. Such layers may contain environmental material.

10.9.6 When the decision has been made that archaeologically significant remains warrant preservation *in situ*, suitable arrangements must be made to prevent their deterioration. The area to be preserved should be clearly defined, fenced off and a suitable preservation strategy produced.

10.10 Test Pitting

A further prospection technique is that of test pitting. Test pitting is not to be used instead of trial excavation, which is the preferred method of evaluation; however it may be used in exceptional circumstances. This will consist of the excavation of trial pits (normally 1.5 by 1.5m) on a regular pattern such as for example, a 50m grid. Full details must be agreed in detail with the planning archaeologist. The general standards and methods of work should conform to those for trial excavation as outlined above (see 10.9).

10.11 Building Recording

In undertaking building recording reference should be made to ALGAO (1997), IfA (2008d), RCHME (2006a), Historic England (2016), Morris (2000) and Wood (1994) for advice on the appropriate techniques. It should be remembered that each project is unique and often a mixture of levels may be required. As a minimum each report must contain some level of written account, drawings and photographs which should be linked to a floor plan.

10.12 Use of Specialists

For the smooth running of an archaeological project it is essential that close liaison takes place between the archaeological contractors and their specialists. This would be of particular value when specialist advice might be needed, for example, if a fragile find requires lifting or environmental samples are to be taken.

11. GENERAL CONSIDERATIONS (v3.0)

11.1 Introduction

This chapter contains matters which must be borne in mind by all those involved in the design of historic environment projects.

11.2 Background

There are certain underlying issues of relevance to those producing specifications and project designs. These factors will influence methodology and resourcing for a specific project. This chapter attempts to deal with these matters but it should be borne in mind that some issues covered will not be relevant to all projects.

11.3 Underlying principles for historic environment work

The professional body for archaeologists is the **Chartered Institute for Archaeologists** whose members are bound to adhere to the Institute's Code of Conduct. Each project should, ideally, be managed or directed by a Member of the CifA. Those who are not will be judged on their past record. The project manager will be expected to ensure that all project staff and sub-contractors are suitably qualified and experienced. The CifA's Code of Conduct contains five underlying principles which follow:

- 11.3.1 The member shall adhere to the highest standards of ethical and responsible behaviour in the conduct of archaeological affairs.
- 11.3.2 The member has a responsibility for the conservation of the historic environment.
- 11.3.3 The member shall conduct his/her work in such a way that reliable information about the past may be acquired, and shall ensure that the results be properly recorded.
- 11.3.4 The member has responsibility for making available the results of archaeological work with reasonable despatch.
- 11.3.5 The member shall recognise the aspirations of employees, colleagues and helpers with regard to all matters relating to employment, including career development, health and safety, terms and conditions and employment and equality of opportunity.

Even if an archaeological contractor or sub-contractor is not a member of the CifA they will still be expected to follow these principles.

The Institute of Historic Building Conservation (IHBC) is the professional body for building conservation and historic environment experts. It seeks to 'establish, develop and maintain the highest standard of conservation practice, to support the effective protection and enhancement of the historic environment, and to promote heritage-led regeneration and access to the historic environment to all'. The IHBC's underlying principle is that:

Historic buildings and places have their own intrinsic cultural, social, educational and spiritual value. Any nation that claims to cherish cultural achievement in any field has a duty to care for its heritage. IHBC members are duty bound to respect heritage across their professional work.

11.4 **Project aims and objectives**

In designing a historic environment project a contractor must include clear aims and objectives. In doing so matters to be considered include:

- a) the local, regional and national research priorities;
- b) assessment of the likely impact of the proposed development upon remains;
- c) the provision of adequate information to influence the development design such that a scheme of preservation can be implemented;
- d) the gathering of such data that the local planning authority has sufficient information upon which to base its decision relating to the balance between the needs for development and conservation.

11.5 Legal and ethical considerations

There are a number of legal and ethical factors which must be considered when undertaking archaeological fieldwork. These relate particularly to human remains and to Treasure (see the Treasure Act 1996 and the associated Code of Practice). The following gives guidance on suitable treatment:

- a) archaeological contractors will be expected to act in accordance with the wishes of the site owner/agent and local residents. This should include abiding by access and office procedures on development sites as well as behaving in an appropriate manner as far as noise and other factors are concerned in relation to the local community;
- b) all unexpected human remains encountered must be left *in situ* and suitably protected from deterioration. All finds should be reported to the police, environmental health officer and the Coroner's Office. **An application should be made whether buried remains are to be removed or intended to be left in situ (since excavation is likely to disturb them)**, and it must be carried out in compliance with the statutory provisions of the Burial Act 1857 and subsequent legislation (see Appendix 1) and after applying to the Ministry of Justice for 'Authority to excavate human remains for archaeological purposes' (see Appendix 6). The excavator must comply with the conditions of the licence as well as other Ministry of Justice and environmental health regulations. It will also be necessary to comply with all reasonable requests of interested parties as to the method of removal, reinterment or disposal of the remains and/or associated items. Attempt must be made at all times not to cause offence to any interested parties. The simplest way to safeguard remains that are not to be excavated is by back-filling as soon as possible;
- c) if discovered during excavation finds of gold and silver, and other such items that are deemed to be Treasure under the Treasure Act must be archaeologically removed to a safe place and reported to the local Coroner immediately (within 14 days) in accordance with the procedures of the Treasure Act 1996 and the Code of Practice 1997 (see 3.12 above). If removal of such finds is not possible on the same day then adequate security arrangements must be made. This clearly also applies to other intrinsically valuable objects which may subsequently not be subject to a Treasure enquiry. Additionally all treasure should be reported to the Finds Liaison Officer at Lincolnshire County Council.

11.6 Site access

A further factor which must be considered during the planning stages of a project is site access. This is relevant both for all site work and for monitoring by planners, archaeologists and other inspectors.

- a) prior to agreement of the final project design, access to the site must be agreed with the land-owner(s), developer, relevant agents and, if thought appropriate, the highway authority and the police.
- b) the archaeological contractor's staff, sub-contractors and monitors must comply with the development contractor's requirements for reporting entering and leaving site.
- c) reasonable access to the site must be granted to the planning and archaeological representatives of the local authority. It may be necessary for the planning archaeologist, through a number of site visits, to ensure that the works are being carried out to proper professional standards and in accordance with the specification.

11.7 Health and safety

It is essential that every historic environment project has the health and safety of all those involved in it as a high priority. Archaeological contractors are expected to operate in accordance with current health and safety legislation and industry regulations. At all times health and safety must take priority over archaeological matters. Special attention must be paid to the following aspects:

- a) no historic environment work shall take place until a defined health and safety policy is in place. A risk assessment should be made for every historic environment project;
- b) all staff and any sub-contractors must fully understand all health and safety implications of the tasks which they perform. Safe practices must be adhered to at all times whether required by the policies of the archaeological contractor or those of the principal development contractor;
- c) all relevant health and safety legislation, regulations and codes of practice should be respected. This requirement constitutes one of the non-archaeological constraints on the project design;
- d) it is a statutory requirement that no personnel work in deep, unsupported excavations. Where the installation of temporary support work is required this should

be provided by the developer as part of the archaeological agreement. All engineering solutions must meet the Health and Safety Regulation requirements.

- e) the applicant and/or developer must provide all reasonably obtainable information on contamination and the location of live services before site works commence;
- f) unless the client has specific requirements to the contrary, archaeological trenches should be back-filled immediately after completion of examination. This should ensure compliance with safety regulations and protect archaeological deposits;

11.8 Insurance

The CifA recommends that an archaeological contractor or other organisation undertaking field projects “must ensure they are covered by adequate insurance policies, public liability and employer's liability, some relevant form of civil liability indemnity or professional indemnity” (CifA 2015a-b) It is also possible for developers to insure against an unexpected discovery provided sufficient evaluation has been undertaken previously.

11.9 Copyright

11.9.1 Under the Copyright, Design and Patents Act 1988 an organisation or person undertaking original work retains the copyright to the written and graphic material. This may have been varied in the contract of work. This position needs to be clearly established at the outset of any project and communicated to all relevant parties. At the commencement of the project the circumstances under which the report or records can be used by other parties should be made clear. The CifA has produced standard wording which should be used (see 11.10.2 below) but attention is also drawn to section 16.9 below.

11.9.2 The CifA recommend the following wording in their standards and guidance (CifA 2015a-e) as alternatives for inclusion in the specification or project design:

“It is normal practice for both the copyright and ownership of the paper and digital archive from the archaeological work to rest with the originating body (the archaeological organisation undertaking the work). The originating body deposits the material with the recipient museum or repository on completion of the contracted works, and normally transfers title and/or licences the use of the records at this stage. These arrangements may be varied by contract, and for the avoidance of doubt it is advisable to include statements on ownership and copyright in a written contract or agreement.”

- 11.9.3 Any material copied or cited in reports should be duly acknowledged and all copyright conditions observed.
- 11.9.4 Any materials submitted in support of a formal planning application lie within the public domain and are publically accessible. This cannot be varied.
- 11.9.5 Any material deposited with the HER will be deemed to be in the public domain. All material so deposited will be made publically available without further reference to the depositor, except for an appropriate level of acknowledgment. In some cases exceptions to the above may be appropriate and should be negotiated on an individual basis with the HER officer.

12. RECORDING SYSTEM (v2.4)

12.1 Introduction

It is clear that the interpretation of data from any given historic environment project can only be maximised if their retrieval is recorded thoroughly.

12.2 Background

Knowledge of past activity as represented by the archaeological record can only be understood through the stratigraphic sequence. The physical relationships between archaeological contexts can only be determined after detailed recording and analysis. Single-context recording as developed by the Museum of London Archaeology Service (MoLAS) should be followed.

12.3 Long-term needs

Before the commencement of fieldwork it is essential that provision is made for long term storage of the subsequent archive. It is preferable for archaeological material to be deposited in a museum which has expertise and resources to adequately provide for long-term storage and survival. If this is not to be the case the planning archaeologist will expect to be assured that other suitable arrangements are being made (see chapter 17).

12.4 The Collection

The main archaeological museum in Lincolnshire is The Collection, Lincoln (see Chapter 17). Dates of deposition of archival material in the museum must be agreed prior to commencement of work, and the deposition date must be included in the specification written by the contractor. The contractor will be provided with a museum accession number and expected to abide by the document *Conditions for the acceptance of archaeological archives*, The Collection, Lincoln (reproduced as chapter 17 below), see Appendix 7 for the address.

12.5 Requirements

12.5.1 A unique site code must be agreed with The Collection, Lincoln and an accession number provided if this is to be the recipient museum.

12.5.2 The site archive should be produced to be compatible with the requirements laid down in Chapter 17, below, by The Collection, Lincoln.

- 12.5.3 Utilising a Harris-Winchester or similar matrix for complex stratigraphical problems.
- 12.5.4 The production of a suitable photographic record
- 12.5.5 The recording of standing buildings must be done in accordance with the guidance from RCHME (1996), Historic England 2016 and ALGAO (1997).
- 12.5.6 The use of terminology and type series coding consistent with those already in use in Lincolnshire, if national codes are being used then these should be cross-referenced to the existing codes used in Lincolnshire (for details of Lincolnshire type series and coding contact The Collection).
- 12.5.7 With the increased use of GIS and CAD, where possible all information should be recorded digitally in three dimensions. A copy of digital data may be deposited with the report in the HER. This should be in the form of a single PDF, ideally PDF/A, if there is a need to deposit in another format this should be discussed in advance with the HER officer. This will not be counted as an archived dataset and if there is a need to archive digital data in perpetuity then contractors should discuss their requirements with The Collection and with the Archaeological Data Service (ADS).

13. ARTEFACT HANDLING (v2.1)

13.1 Introduction

This chapter gives an outline of minimum requirements for the handling of artefactual material retrieved from archaeological interventions.

13.2 Background

All staff, including all sub-contracted specialists involved with a project, must be made aware of *First Aid for Finds* (Watkinson and Neal, 1998), Society of Museum Archaeologists guidelines and other related documents (see Bibliography) and should follow the procedures listed therein. Of particular value to those managing archaeological archives both on-site and in long-term storage are these publications from Historic England (English Heritage 2011 and 2008b). It is imperative that the implications of these documents are noted at the tendering stage of any project because they have both practical and financial implications. Advice on the handling of all archaeological materials can be provided by the staff of The Collection, Lincoln. In particular the advice of the museum's conservation staff will be of value when handling sensitive materials.

13.3 Processing

13.3.1 Bulk finds

All bulk finds will be washed, dried, marked (as appropriate for each material) and packaged according to the standards set in chapter 17. Chapter 17 also identifies details to be marked on all bags and boxes of finds, including the museum accession number.

13.3.2 Registered finds

All registered finds (small finds) should be processed and packaged according to standards of good practice. All such finds should be submitted for X-radiography and stabilisation where appropriate. Chapter 17 identifies all details to be marked on bags and boxes, including the museum accession number.

13.3.3 Samples

All samples must be labelled according to type (e.g. industrial, environmental, etc) and the reason for their retention clearly specified. Arrangements should be made for the processing of all samples during the excavation or at the assessment stage and any submitted to the museum must have been prepared for long-term storage. Certain types of samples may be retained in specialist research laboratories.

13.4 Basic record

A paper and computer record should be created for all the documentary archive which relates to finds and their analysis. The minimum level of recording for each category is given below.

13.4.1 The following is the minimum amount of information that should be recorded for each context following the terminology and coding system used in The Collections Thesaurus:

- a) site code and accession number;
- b) context;
- c) category;
- d) count/weight;
- e) comments, if appropriate.

13.4.2 For pottery and building material, the following is the minimum amount of information that should be recorded for each context:

- a) site code and accession number;
- b) context;
- c) date range;
- d) fabric code or detailed fabric description;
- e) diagnostic forms;
- f) condition of group, where appropriate (e.g. smashed, burnt, abraded);
- g) obvious cross joins to other contexts;
- h) sherd count and/or weight in grams;
- i) suitability for illustration, if appropriate;
- j) decoration, if appropriate;
- k) comments, if appropriate.

13.4.3 For registered finds, the following is the minimum amount of information that should be recorded for each object following the terminology and coding system used in The Collection Thesaurus:

- a) site code and accession number;
- b) context;
- c) registration number;
- d) material;
- e) object description;
- f) the X-radiograph number;
- g) dimensions or preferably an accurate sketch drawing;
- h) comments, if appropriate.

13.4.4 For samples, the following is the minimum amount of information that should be recorded for each sample:

- a) site code and accession number (sample number if appropriate);
- b) context;
- c) sample type;
- d) weight/volume;
- e) comments.

13.5 The finds report

13.5.1 A finds report should accompany all finds deposited in The Collection. The report should include all the following points:

- a) a statement about the condition of the material recovered, noting whether site conditions may have been favourable or precluded the preservation of certain materials;
- b) a statement on how the finds were collected and any value or bias that the collection and sampling strategies may have created should be noted;
- c) a statement on any dispersal policy (this must be pre-arranged with the museum) and a list of material to be considered in the five yearly review;
- d) a statement concerning the potential of the finds both to answer site based questions, regional research topics and problems intrinsic to the finds themselves;
- e) a statement outlining key objects or groups;
- f) a quantification of the data broken down into the major stratigraphic units of the site, if appropriate;
- g) a list of **all** the finds by material, not just ceramics;
- h) a list of all staff and specialists involved in the project;
- i) a list of displayable objects and reasons for selection;

- j) recommendations for long term curation and storage, highlighting any particularly vulnerable items;
- k) the conservation report and all associated records, if any active conservation work has been undertaken;
- l) a statement regarding any further work that should be done (academic or curatorial), to include any material that could be considered for dispersal in the five yearly review.

13.6 The finds archive

13.6.1 At the end of the project the artefact element of the site archive should consist of the following:

- a) the finds themselves correctly boxed, packaged and labelled;
- b) the basic documentary record (including a microform and computerised copy);
- c) the X-radiographs;
- d) a finds report;
- e) any drawings, photographs (prints and/or slides) and illustrations;
- f) a statement of the number and sizes of boxes in which the different categories of finds are stored;
- g) all samples stored in specialist laboratories should be listed along with the full address of the laboratory and a description of the sample type;
- h) a list of all codes used with a full expansion;

13.7 Environmental samples

Guidance (English Heritage 2011) should be followed when handling samples of an environmental nature or ecofacts. Environmental specialists should be involved in the handling of samples and all material “must be adequately recorded, labelled, packaged and stored”. An assessment of the samples retrieved should be made “to give an overview of the type, abundance, quality, preservation and academic potential of the environmental material”.

14 SPECIALISTS (v1.0)

14.1 Specialists working in Lincolnshire

Established specialists new to working in Lincolnshire should demonstrate competency through appropriate qualifications, peer-reviewed publications, curriculum vitae and academic references, these should all be submitted to the appropriate planning curator. Any specification for archaeological work naming such a specialist will not be approved until the above has been verified.

Specialists who are undergoing training with a suitable qualified mentor are able to work in Lincolnshire. Details of their curriculum vita, references, training and mentor details should be submitted to the archaeological curator.

All specialisms are equally important and whilst not all are covered in the same detail in this chapter of the handbook further details may be sought from the respective specialists. It is intended that this section be expanded by the relevant specialists.

14.2 Pottery Specialists

14.2.1 Pottery Codes

To ensure continuity of practice and build upon existing knowledge and expertise it is important that all pottery uses the same ceramic codes names. Working with such a standardised framework enhances our understanding of ceramic production and use within the county as well as facilitating identification of issues of local and national importance All pottery should be coded using the national type series, where existing, and should be accompanied by a concordance table with any local pottery type series. (Young, Vince and Nailor 2005, Darling and Precious 2011, Boyle, Kendall and Young 2055, Boyle and Young 2008) See appendix 12.

Finds that are not covered by any existing type series and coding systems or are only covered by generic codes, should be given fuller descriptions.

14.2.2 Lincolnshire Type Series

Great advances have been made in the understanding of the ceramic sequences in Lincolnshire over the last thirty years but much of this knowledge remains in 'grey literature' although the Roman and Saxon to medieval sequences are published.

Ceramic specialists who have not worked extensively within the county are advised to consult the HER for individual site reports for the areas in which they are working.

The pottery found in Lincolnshire is complex, for example there are currently 28 individual medieval pottery (12th to 15th century) zones identified in Lincolnshire alone, so it is recommended that all specialists, particularly those not regularly working in Lincolnshire should make use of the Finds Type Series in order to accurately identify ware types.

The Finds Type Series for Roman and Post Roman ceramics is held at Lincoln City and County Museum (The Collection) and can be viewed by appointment.

The Collection

1 Danes Terrace

Lincoln

LN2 1LP

01522 550 990

A Rural Kesteven Type Series is held by Heritage Lincolnshire and can be viewed by appointment.

The Old School

Cameron Street

Heckington

Lincolnshire

NG34 9RW

01529 461618

An additional Finds Type Series, more specific to North Lincolnshire, is held in North Lincolnshire Museum.

Oswald Road

Scunthorpe

North Lincolnshire

DN15 7BD

01724 843533

The specialists who regularly work in Lincolnshire are also happy to discuss any issue relating to work that may be undertaken by any other specialist, especially those without the same amount of local experience.

14.2.3 National Guidance

Every specialist should be aware of their own national guidance. This guidance should be followed when producing work in Lincolnshire. All work should be placed within its local and regional context and should refer to both local and nation research objectives.

2001, Ceramic Building Material: Draft Minimum standards for recovery, curation, analysis and publication [internet].

www.tegula.freeserve.co.uk/acbmg/CBMGDE3.htm

Darling, M. (ed.) 1994. Guidelines for the Archiving of Roman Pottery. Study Group for Roman Pottery (SGRP).

Slowikowski, A.M., Nenk, B. and Pearce, J. 2001. Minimum standards for the processing, recording, analysis and publication of post-Roman ceramics. Occasional paper 2. London: Medieval Pottery Research Group.

Irving, A. 2011. A Research Framework for Post-Roman Ceramic Studies in Britain: Medieval Pottery Research Group Occasional Paper 6.

2010. A Guide for the Classification of Medieval Ceramic Forms, Medieval Pottery Research Group Occasional Paper 2.

Boyle, A. Kendall, R. and Young, J. 2008. A fabric Type Series for Post-Roman Pottery in Rural Kesteven, Lincolnshire (5th to 19th centuries) Unpublished report for Heritage Trust of Lincolnshire/English Heritage.

Darling, M and Precious, B. 2011. A Corpus of Anglo-Saxon and Medieval Pottery from Lincoln. Lincoln Archaeological Studies 7.

2016 A Standard for Pottery Studies In Archaeology. Prehistoric Ceramics Research Group for Roman Pottery Medieval Pottery Research Group

14.3 Human and Faunal Remains

Before the exhumation of human remains takes place, a licence from the Ministry of Justice must be obtained. Dependant on the type of burial: graveyard/ lone burials/ religious affiliation or age of burial different acts of law apply, the Ministry of Justice will advise and ensure that the appropriate license is applied for.

Analysis of human and faunal remains should be undertaken by a trained osteologist or zooarchaeologist respectively. The remains must be washed, dried, marked, packed and stored, if appropriate, following established guidelines (Brickley, M. and J.I. McKinley 2004, English Heritage 2004, 2005). Preliminary assessment of the skeletal assemblage should be undertaken in order to evaluate the potential for further analysis. A skeletal inventory for the human and faunal remains should be compiled. At the preliminary stage, as a minimum, the human remains should be analysed to determine the minimum number of individuals, the condition, age and sex of the bone, any palaeopathological features and any indication of trauma. Further work, which can be undertaken alongside the preliminary analysis or at a later date, will include assessment of the skeletal height, the metric and non-metric traits and the demography of the skeletal population (English Heritage 2013). For faunal remains, species identification and the minimum number of species should be determined as a minimum. Further analysis should include dimensions of the bone, breed parallels and observations on utilisation and pathological abnormalities.

If it is determined that the skeletal assemblage is worth retaining for further scientific analysis, the appropriate archiving and long term storage procedures should be undertaken according to The Collection's guidelines.

Due consideration of the ethical treatment of human remains should be taken into account at all times during pre- and post-excavation and reburial.

14.4 Registered Small Finds

In order to ensure that finds are recorded to a common standard, specialist reports on registered small finds should adhere to the agreed term-lists for materials and object-names set out by the SPECTRUM standard (formerly the Museums Documentation Association) <http://www.collectionstrust.org.uk/collections-link/collections-management/spectrum/the-spectrum-standard> accessed 17.5.2016 Registered small finds should, where possible, be referenced according to current accepted typologies and/or published catalogues (for example *Roman Imperial Coinage* (RIC) for Roman coins; Bruce-Mitford (2005) for hanging-

bowls), and include a discussion of their local, regional and national significance as considered appropriate.

14.4 Conservation Work

14.3.1 Commissioning Conservation Work

When presenting an assemblage for a conservation assessment it is helpful if a specification for the level and type of work required is provided rather than just for example, a request to assess for 'conservation'. Conservation is a discipline, not a specific task – the level of work required and therefore the tasks needed, will vary dependant on the project requirements.

Conservation work required within the planning and development context is likely to fall into the following areas:

14.3.2 Basic Minimum Requirement to enable deposition

This will normally involve:

- Packaging to provide physical support necessary for long term storage
- Packaging to provide necessary environmental control for long term storage
- Remedial treatment of actively deteriorating objects
- X-radiography to clarify obscured morphology

and are all tasks that are likely to need to be commissioned from a suitably qualified conservator (and in the case of any direct intervention on an object, it will be essential) who will have the necessary expertise to assess an assemblage against these criteria.

Completion of these tasks will ensure 'stabilisation of the assemblage to confer a level of long-term integrity to it' and 'investigation of finds to clarify morphology' as set out in chapter 17. If the level of work required is not clearly specified to the conservator (especially if they are non-local and not familiar with LCC's guidelines), it may result in either difficulties during handover if essential criteria are not met, or in unnecessary work being carried out.

When this level of work has been completed and the assemblage is returned, **at this point** the archive is ready for transfer to the museum store, however if there is a delay before hand-over and environmental control is not maintained, deterioration will almost certainly occur which will need to be remedied before the assemblage will be accepted for deposition.

14.3.3 Further Investigation

If specialist reports recommend further investigation of finds, ensure the specialist clearly explains the issue that requires investigation and that full details of the query are passed on to the conservator, rather than for example just a list of items selected 'for conservation'. Further investigation could involve a number of techniques including further investigative x-radiography or other analytical technique or investigative corrosion removal in the specific area of interest, depending on the actual query. If adequate information from the specialist is not provided it may not be possible for the conservator to make an accurate assessment of the work needed.

14.3.4 Aesthetic Improvement

Improvement of the appearance for aesthetic reasons (commonly referred to as 'full cleaning' or 'display level conservation') is normally only required for advocacy purposes, e.g. for museum-type displays and is less likely to be a requirement within the planning and development context and much more likely to be something the receiving museum would consider once the finds have been deposited. A project might occasionally involve this level of work prior to deposition for e.g. a public event. The term 'full-cleaning' can be misleading even in this context as there can still be options for the level of work undertaken depending on the specific project requirement. A discussion with the conservator will enable them to advise appropriately.

14.3.5 Scheduling

It is worth contacting the conservator as early as possible before conservation work is needed to discuss requirements and scheduling. Some conservation work is time-consuming and/or requires a long treatment period (e.g. treatment of waterlogged wood that can take weeks or months of treatment to stabilise it). It may not be possible to fit work in immediately if a conservation practice already has other commitments, particularly if no prior notice is given.

15 THE REPORT (v2.3)

15.1 Introduction

This chapter establishes guidance on the preferred content for historic environment reports. It is expected that as much information listed here as possible will be incorporated in to specific project reports. Nevertheless it is accepted that each project will have its own requirements.

15.2 Background

15.2.1 Most evaluation and assessment reports are prepared for submission in support of applications for planning consent or in response to a planning requirement. They should therefore present the historic environment information in such a way that planners can appreciate the full impact of a proposed scheme on any heritage assets and assess the suitability of any mitigation strategy proposed. At the same time it should always be borne in mind that the report must ultimately satisfy the requirements of the client. It is not possible to establish detailed guidelines that will apply in all cases and much will depend on the wishes and needs of the clients and planning authorities involved.

15.2.2 Sometimes there are occasions when evaluation reports are needed before the results of fieldwork can be fully assessed and it may be appropriate to produce interim reports. All such reports should be made available to the client, the relevant planning authority and be deposited with the county HER. Clearly any reports produced as a result of works to a Scheduled Monument must be sent to Historic England and to the HER.

15.3 Purpose of the report

Essentially a report must define the location, extent and significance of any heritage asset which may be on site and illustrate how these may be affected by any development proposals. Reports are produced for various reasons such as: interim reports; reports for publication and reports on research projects, each should be fit for purpose.

15.4 Relevance

These guidelines, although in part applicable to desk-based assessments and building recording are largely aimed at field evaluation, archaeological monitoring and excavation

reports. It is not expected that every report will follow the exact format given but they should contain the information suggested.

15.5 Draft report stage

In some cases it may be advisable to discuss the contents of a report with the relevant planning archaeologist, the staff of the county HER and the local planning authority at draft stage.

15.6 Report content

15.6.1 The subsequent final report text should consist of the following sections:

- a) cover page;
- b) list of contents, figures, tables, etc;
- c) non-technical summary;
- d) introduction;
- e) planning background;
- f) archaeological and historical background;
- g) methodology;
- h) results;
- i) discussion;
- j) conclusion;
- k) OASIS cover sheet.

15.6.2 The cover page of the final report should contain the following information:

- a) the full site address (name if applicable);
- b) the site code and the museum accession number;
- c) an OS National Grid Reference for the site;
- d) the name of the author of the report and/or its originating body;
- e) date of the report (month and year);
- f) planning application number(s) if relevant;
- g) the location of the digital archive and accession number.

15.6.3 The report should be preceded by a list of all contents, including chapters, figures, plates and tables.

- 15.6.4 There must be a non technical summary of the context, findings and conclusions of the report.
- 15.6.5 There must be a general introduction to include the following:
- a) who commissioned the report;
 - b) why the report was needed (e.g. to inform the design of a redevelopment scheme, for submission in support of an application, to facilitate disposal/sale of a site, in order to meet existing planning constraints, etc);
 - c) constraints in the preparation of the report (such as working to a specific brief; limitations in site access/availability; funds; time; etc);
 - d) the dates on which the work was carried out;
 - e) acknowledgements.
- 15.6.6 There must be a summary of the planning background which led to the generation of the project, see 8.4.3 above. This should include:
- a) a brief summary of the planning history of the site;
 - b) the local planning authority references to any current planning applications;
 - c) the text of or references to any relevant, outstanding planning conditions;
 - d) details of any other planning constraints (eg Scheduled Monuments, Listed Buildings, Conservation Areas, Tree Preservation Orders, Sites of Special Scientific Interest, etc);
 - e) a clearly marked plan of the application area as proposed or likely to be proposed.
- 15.6.7 The next section should be a brief archaeological background to the site and its immediate vicinity. This will put the present project in context and should include:
- a) the principal archaeological reasons for the work being commissioned;
 - b) a brief summary of HER records directly pertinent to the site;
 - c) a brief summary of the geological, historical, topographic and archaeological background of the proposed development site and immediate surrounding area, as relevant;
 - d) reference to any assessment reports, project designs and research designs prepared for the site.
- 15.6.8 In the light of the above the report should contain a clear statement of the project's overall aims and objectives. In most cases this will have been stated in the project

design but may have changed, in agreement with the planning archaeologist, throughout the duration of the project.

15.6.9 The report must then contain a clear statement of the archaeological methodology utilised in planning and implementing the project. Consideration should be given to the inclusion of the following:

- a) any fieldwork conducted that was intended to assess known sites or used as a prospection method;
- b) the logistical constraints, such as services, etc;
- c) the use of predictive models in designing the fieldwork;
- d) the reason why this type of exercise was conducted (ie why a field evaluation was prepared instead of a desk-based assessment or vice-versa, etc);
- e) the areas sampled and studied (including a site location plan based on the 1:2500 Ordnance Survey) and a trench location plan at 1:200 or 1:100 showing the location of the areas investigated. Often it is useful to express the sample size as a percentage of the study area;
- f) the methods employed (stratigraphic excavation, augering, field walking, etc);
- g) the time and resources dedicated to the various elements of the investigation;
- h) any deviations from the originally agreed programme of archaeological works (as in trench layout, etc).

15.6.10 The next section must be a thorough description of the results of the project. The section should:

- a) define and briefly describe the nature, location, extent and date of archaeological and environmental material covered;
- b) include plans of principal archaeological horizons, structures and phases as well as potential deposits;
- c) include adequate section and plan drawings, with the ground level shown where appropriate (include levels above Ordnance Datum on all main archaeological horizons and features, indicating clearly any significant changes in level or slope). The usual accepted scale for archaeological site plans is 1:20 and sections are 1:10 unless circumstances indicate that other scales would be more appropriate;
- d) include a land use diagram, or simplified stratigraphic diagram, where complex changes in site use were identified;
- e) Include tables summarising features and all artefacts, not just ceramics, together with a full description and brief interpretations. Avoid presenting excessive detail in the text by tabulating most information on context descriptions, archaeological

levels, etc (where such tables run to some length they should be appended to the report);

- f) include an explicit statement, if relevant, that no finds, in any form, have been recovered, or if they have been discarded;
- g) quantify the area/sample studied/recovered (as a percentage of the development area and where possible by volume, including the number of stratigraphic units identified, bulk of finds, etc);
- h) contain computer generated plots of geophysical survey data and interpretation and distribution plots, analysis and interpretation of fieldwalking and other data;
- i) include specialist descriptions of artefacts and/or ecofacts;
- j) contain photographs of the site which should include at least a general view of the locality, a view of work in progress and a record excavated areas that contained archaeological deposits. All plates should be of high photographic quality and in original format i.e. colour or black and white. The minimum size for photographs is 10cm by 15cm.

15.6.11 The following should be included, if appropriate:

- a) mapping the present site topography including evidence of ground slope/contours;
- b) combining evidence gained from the site evaluation with a map regression exercise and other relevant information to show previous land-use and to map the likely extent and depth of previous disturbance by such things as cellars, quarries, services and other features;
- c) mapping those areas where constraints (such as areas of ground contamination, wildlife/environmental interest, etc) limit or prevent access to archaeological deposits;
- d) describing and mapping the anticipated extent of archaeological deposits and structures across the site distinguishing between areas directly observed, those where knowledge can be projected and those where the evidence is inadequate;
- e) mapping differences across the site in the likely quality (including a consideration of any likely difference in the quality of organic survival) and quantity (by depth, stratigraphic complexity, and/or density of finds) of the archaeological resource;
- f) giving an indication of the possible impact and development footprint of any current redevelopment scheme or schemes on the archaeological remains (illustrating this by way of plan and schematic section);
- g) estimating the percentage of surviving archaeological deposits threatened by any such proposals;

- h) using reconstructed sections to illustrate differences in level between actual and proposed building footprints and their likely impact on buried archaeological remains;
- i) a critical review of the effectiveness of the methodology;
- j) a consideration of the historic landscape characterisation.

15.6.12 The report must also contain an assessment of importance of the findings of the project and a consideration of the archaeology within its local, regional and national context. These should avoid making any recommendations for further archaeological action regarding the site. The terminology of the Secretary of State for the Environment's published non-statutory criteria (see Appendix 2) for the scheduling of monuments should be considered for use in the assessment of national importance where appropriate. Artefactual and environmental potential should also be assessed.

15.6.13 The main body of the report must end with some conclusions and comments on the effectiveness of the project in meeting its original objectives.

15.6.14 Some information is best presented in appendices. Including the following:

- a) a complete bibliography of all the reference material including sources consulted but not referred to in the text;
- b) details of the present location and size of the archive (this to include both finds and the paper archive), and plans for its future, including its deposition date. This should also include all the relevant details pertinent to the accession of the digital archive;
- c) any bore-hole, archaeological assessment or archive reports that offer important supplementary information;
- d) tables of archaeological information extracted from the main body of the report for reasons of length or to ease reference;
- e) details of any mitigation strategy already proposed for the site, if available, including any archaeological brief and specification of works;
- f) copies of any desk-based assessments prepared for the site (where these have not already been made available);
- g) all specialist reports considered to warrant inclusion in their entirety;
- h) context register with brief descriptions;
- i) photographic register;
- j) a copy of the completed Project Summary page from the OASIS record (see section 16.5).

16. DISSEMINATION (v3.0)

16.1 Introduction

While most historic environment work considered in this manual is development-led the results of such work may be of value to a wider audience than the parties professionally involved. To achieve this, results of historic environment work must enter the public domain as part of the planning condition.

16.2 Background

Historic environment professionals (contracting archaeologists) should bear in mind that there is a requirement to report the findings of a historic environment project beyond the normal planning audience. This may range from the publicising of a small project amongst the local public to mass media publicity for finds of national interest.

16.3 County Historic Environment Record

Each county or unitary authority in England has a Historic Environment Record (HER or Sites and Monuments Record (SMR). The Lincolnshire HER is held and maintained by the Historic Environment Team of the Planning Group within Lincolnshire County Council (see Appendix 7 for the address. The information held within the HER forms the basis for the appraisal of historic environment needs within the planning process by both county and district historic environment staff. It is essential that the database is continually updated to ensure adequate historic environment management responses to development issues. The HER is a public resource and is available for consultation to all those with an interest in studying the past or managing the heritage. Copies of all reports, interim and final, should be lodged with the county HER. The needs of commercial confidentiality may apply at a pre-application stage and can be accommodated but should be arranged at the time of deposition. Reports that are deposited as confidential will normally be released into the public domain after six months. All reports produced to support a formal planning application or are used to discharge a planning condition will be in the public domain.

16.4 Local archaeological journal

The journal *Lincolnshire History and Archaeology* is the main organ for the publishing of the results of historic and archaeological work in Lincolnshire.

16.5 OASIS

The OASIS project (On-line Access to the Index of Archaeological Investigations) brings together a number of strategic partners, including: the Archaeology Data Service and Historic England under the umbrella of the University of York.

The planning archaeologists in Lincolnshire have, as a group, made a decision to adopt OASIS and ask for OASIS forms to be completed as part of the planning process. The requirement to complete OASIS forms on-line should be included in all briefs and acknowledged in all specifications in Lincolnshire.

The contractor should provide a copy of the completed project summary page from the OASIS record. This should either be bound into the grey literature report as an appendix or attached to any covering letter that is sent to the planning archaeologist.

The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer-funded fieldwork. The OASIS data capture form has been designed to help in the flow of information from data producers, such as contracting units, through to local and national data managers, such as SMRs, HERs and the NMR. In Lincolnshire the resulting information will be validated by the planning archaeologists and/or the relevant records officers at Lincoln City Heritage Database, North Lincolnshire HER, North-East Lincolnshire HER, the Lincolnshire HER and the Heritage Trust of Lincolnshire, and passed onto the ADS for inclusion in its online catalogue ArchSearch. A unique OASIS record should be created and completed for each separate report or phase of archaeological work. Digital copies of the project report should, wherever possible, be attached to their associated OASIS record, so that they can be added to the Archaeology Data Service's online Grey Literature Library, for wider public dissemination.

Since the completion of an OASIS form will effectively place a synopsis of the results of archaeological work in the public domain, the Lincolnshire planning archaeologists will no longer require contractors to report the findings of an archaeological project in the local archaeological journal as a brief listing, or as a longer note, on a piece of fieldwork. However, it is expected that full reports of large-scale fieldwork will still be needed, such as those that appear in *Lincolnshire History and Archaeology* and in national journals from time to time.

16.6 Press and mass media

The publicising of the activities of historic environment professionals is essential for increasing the wider appreciation of our heritage; when carried out effectively this publicity

can also have benefits for the developer or funding body. Clearly there are matters of great sensitivity that should always be considered when preparing publicity, in particular site security, the proper treatment of human remains and so on. It is essential that all publicity is carried out only with the agreement of and in full consultation with all interested parties.

16.7 **Museum displays**

The dissemination of historic environment information to the public is of prime importance. For many people museum displays provide one of the easiest routes of access to the results of historic environment work. Contracting units should liaise with museum staff as well as finds and conservation specialists to ensure displays are mounted wherever possible and appropriate.

ARCHAEOLOGICAL ARCHIVES
DEPOSITION GUIDELINES



**This document forms chapter 17 of the
Lincolnshire Archaeological Handbook**

v4, APRIL 2016

PART 1 – PROCEDURES AND PRINCIPLES

- 17.1 INTRODUCTION
- 17.2 THE HERITAGE SERVICE AND THE ARCHIVE
- 17.3 COMPOSITION OF THE ARCHIVE
- 17.4 ACCESSION NUMBERS AND SITE CODES
- 17.5 PROCEDURE FOR NOTIFICATION OF WORK AND DEPOSITING ARCHIVES
- 17.6 CONSULTATION
- 17.7 FINDS SPECIALISTS
- 17.8 SELECTION, RETENTION AND DISPERSAL
 - 17.8.1 Retention and dispersal rationale
 - 17.8.2 Human remains
 - 17.8.3 Sampling
 - 17.8.4 Industrial processes
 - 17.8.5 Structural remains
 - 17.8.6 Disposal from completed archives
- 17.9 LEGAL TITLE
- 17.10 COPYRIGHT
- 17.11 CHARGING POLICY

PART 2 – FINDS ARCHIVES

- 17.12 CONSERVATION AND INVESTIGATION OVERVIEW
 - 17.12.1 Stabilisation of the assemblage
 - 17.12.2 Investigation of finds
- 17.13 CONSERVATION OF OBJECTS
 - 17.13.1 Levels of conservation
 - 17.13.2 Remedial conservation
 - 17.13.3 Investigative conservation
 - 17.13.4 Aesthetic improvement

17.13.5 Additional points

17.14 INVESTIGATIVE TECHNIQUES

17.14.1 X radiography

17.14.2 Other analyses

17.15 OBJECT PACKAGING

17.15.1 Object packaging principles

17.15.2 Bulk finds – non sensitive

17.15.3 Bulk finds – sensitive

17.15.4 Registered finds

17.15.5 Environment

17.16 OBJECT MARKING

17.16.1 Principles of object marking

17.16.2 Object marking requirements

17.16.3 Locating the mark

17.16.4 Suitability of an object for marking

17.16.5 Marking an object

PART 3 – DOCUMENTARY ARCHIVES

17.17 THE DOCUMENTARY ARCHIVE

17.17.1 Documentary archive marking

17.17.2 Documentary archive contents

17.17.3 Documentary archive materials

17.17.4 Drawings and plans

17.17.5 Photography overview

17.17.6 Traditional film photographs

17.17.7 Transparencies

17.17.8 Digital photographs

17.17.9 Digital media

17.17.10 X-radiography

APPENDIX A – COLLECTING AREA MAP

APPENDIX B – NOTIFICATION FORM

APPENDIX C – ARCHIVE BOX SIZES AND SUPPLIERS DETAILS

APPENDIX D – TRANSFER OF TITLE FORM

PART 1

PROCEDURES AND PRINCIPLES

17.1 INTRODUCTION

Following the retrieval of archaeological data it is essential that an ordered archive is produced and lodged with a suitable repository. In the post 1974 county of Lincolnshire this is the Lincolnshire County Council Heritage Service (hereafter referred to as 'the Heritage Service'). Material excavated in North Lincolnshire and North East Lincolnshire should be deposited in the relevant repository. Throughout this document, contracting archaeological units and amateur archaeological organisations involved in the preparation of archives are referred to as 'the contractor'.

The Heritage Service's stores are the only ones in the county to be approved and registered by Historic England as suitable for housing archaeological archives from excavations that they have funded. It is fitted with security devices and environmental monitoring equipment to ensure the security and integrity of the archives stored there. The Heritage Service's collecting policy guides it to collect and preserve the evidence of human occupation within the county for the benefit of the people of Lincolnshire. The collections contain items dating from the earliest evidence of human occupation in the county to the 19th Century.

In order that the collections be of as much benefit as possible for future research, education and display, it is essential for the Heritage Service to obtain the archives from all scientifically conducted work. This document sets out the current minimum criteria for the acceptance of archaeological archives and provides guidelines for contractors in the preparation of the archive.

The Heritage Service expects that contractors will adhere to the following fundamental principles of creating an archaeological archive:

- All archaeological projects must result in a stable, ordered, accessible archive
- All aspects of the archaeological process affect the quality of the resulting archive
- Standards for the creation, management and preparation of the archive must be understood and agreed at the beginning of any project
- Ensuring the security and stability of the archive is a continuous process and a universal responsibility
- A project has not been completed until the archive has been transferred successfully and is fully accessible for consultation

Regular contact with the Heritage Service regarding all the stages described in this document is recommended.

17.2 THE HERITAGE SERVICE AND THE ARCHIVE

The Heritage Service will accept the total archive from any systematic archaeological work carried out within the post 1974 county of Lincolnshire (see Appendix A) provided that it meets the requirements set out in this document. This includes the product of building surveys, photographic surveys and geophysical surveys. These requirements are designed to facilitate the effective storage, retrieval and future study of the material. The main consideration is the integrity of the archive. In order to be most effective for study it is important that both the paper and the object archive are stored together. There will be occasions when this is not possible and the Heritage Service will accept the paper archive (or a full copy) if it proves impossible to donate the object archive. This should be regarded as an exception rather than a rule, however, and must be discussed with the Heritage Service at the earliest opportunity. Retrieval for study and study itself are greatly facilitated if a standard format is adopted in the production and management of an archive. The Heritage Service's requirements and procedures are set out below.

The Heritage Service will allow access to archives in its care through prior appointment. Appointments can be made by emailing archdeposition@lincolnshire.gov.uk.

If an archive is only partly within the Heritage Service's collecting boundary, for example a pipeline project, the final destination of the archive must be discussed before the commencement of work with all relevant repositories. It is often beneficial for an archive to be retained intact, rather than split between repositories. This is the only instance in which the Heritage Service will collect excavated material from outside its collecting boundaries. The Heritage Service will expect to receive a copy of the documentary archive for sites across county boundaries where the physical archive is being held outside of Lincolnshire.

The Heritage Service will under no circumstances accept archives resulting from work that it believes have been undertaken unlawfully, for example without permission of the landowner or on a protected site without relevant permissions.

17.3 COMPOSITION OF THE ARCHIVE

The archive is defined as the total assemblage of artefacts and records from an excavation or field survey.

Every archive will comprise up to four elements:

- Documentary archive
- Non-sensitive bulk finds
- Sensitive bulk finds
- Registered finds

These elements must remain distinct within the archive, and finds and documentation **must** be boxed separately. Parts 2 and 3 of this document explain how the Heritage Service expects each of these categories of material to be treated and archived.

The Heritage Service advises that terminology detailed in the Museum Documentation Association (MDA) Archaeological Objects Thesaurus (obtainable through the Collections Trust) be employed when describing objects in the archive.

Contractors are expected to use professional judgement when determining which objects in an assemblage are registered on site. The Heritage Service expects that the results of post-excavation analysis (e.g. finds specialists' reports and x-radiographs) will be used in determining the importance of an object and its suitability for registration. This may mean that previously bulk objects will become registered during the post-excavation phase. If an object becomes registered in this way, the Heritage Service expects that it will be re-assessed to ensure that any stabilisation treatment and packaging are suitable for its new status. The object should also be re-assessed by a specialist if necessary. The Heritage Service reserves the right to refuse to accept an archive if such second phase work is not satisfactorily investigated.

17.4 ACCESSION NUMBERS AND SITE CODES

The Heritage Service will assign a unique accession number and site code to a project at its inception, which the contractor must request.

Accession numbers

The accession number is the unique number given by the Heritage Service to any object entering its permanent collections, archaeological or otherwise. It consists of three elements:

- An alphabetical code which identifies the museum nationally ('LCNCC')
- The year in which the number is generated
- A sequential number

An example accession number would therefore be 'LCNCC: 2007.123'. The accession number must be written in full whenever it is used.

Site codes

The site code is a 3 or 4 letter reference to the site name, followed by the year of excavation. Each site code will be unique in that year to avoid confusion. Contractors are invited on the site notification form (see Appendix B) to choose their own preferred site codes, though these must not be used until confirmed by the Heritage Service.

Large sites requiring work over a number of years or where subsequent phases of work are required may keep the same letter code and be differentiated by the year number. For example, an intervention at Hall Farm, Saxilby in 2014 may be issued a site code of HFS14. A second year on the same site would be given the site code HFS15. The contractor must always confirm this with the Heritage Service and not assume that the same code will be used.

New accession numbers will be required if a previous stage of work has been deposited with the Heritage Service, or is being undertaken by a different contractor. New accession numbers should also be requested when a new phase of a project involves a 'reset' of site numbering (e.g. context and find numbers restart at '1').

The accession number relates to the year in which it was processed, and may therefore differ from the year identifier of the site code. This is acceptable, and the Heritage Service cannot generate retrospective accession numbers.

Please note that the informal abbreviation 'LCCM', sometimes used to refer to the former City and County Museum, is not an official code, and must not be used on archives.

The Heritage Service issued site code will be the only code associated with the completed archive, and replaces any temporary codes used by contractors

17.5 PROCEDURE FOR NOTIFICATION OF WORK AND DEPOSITING ARCHIVES

The full procedure for applying to the Heritage Service for a site code / accession number and depositing completed archives is set out in the flow chart below. The site code / accession number application form can be found in Appendix B.

It is the responsibility of the contractor to ensure the security of the archive until its deposition with the Heritage Service (see also section 17.15.5). This includes insurance of objects when with the contractor (or any subcontractors or specialists) and during transit to the Heritage Service. The Heritage Service will not be financially or ethically liable for any costs incurred to archives prior to their deposition. Any damage found to have occurred to an archive upon deposition, even if it has occurred during transit, will need to be resolved by the contractor.

The costs of transporting the archive to the Heritage Service must be met by the contractor. **Archives must be personally deposited with the Heritage Service by the contractor. The Heritage Service will not accept archives delivered by courier. The maximum number of boxes to be deposited in a single archive deposition should not exceed 25 (finds boxes and documentary boxes).** The Heritage Service may allow this figure to be raised in some circumstances, following discussion with the contractor. The contractor must forward a list of the archives to be deposited and the total box count when arranging a deposition.

The entire archive must be deposited at the same time. It is the responsibility of contractors to ensure that all elements of an archive are prepared for deposition at the same time (e.g. finds returned from specialists) and inform the Heritage Service if this is not possible.

Deposition dates

The Heritage Service will be available for the deposition of archives for six blocks in the year. These blocks are:

The first full week in February

The first full week in April

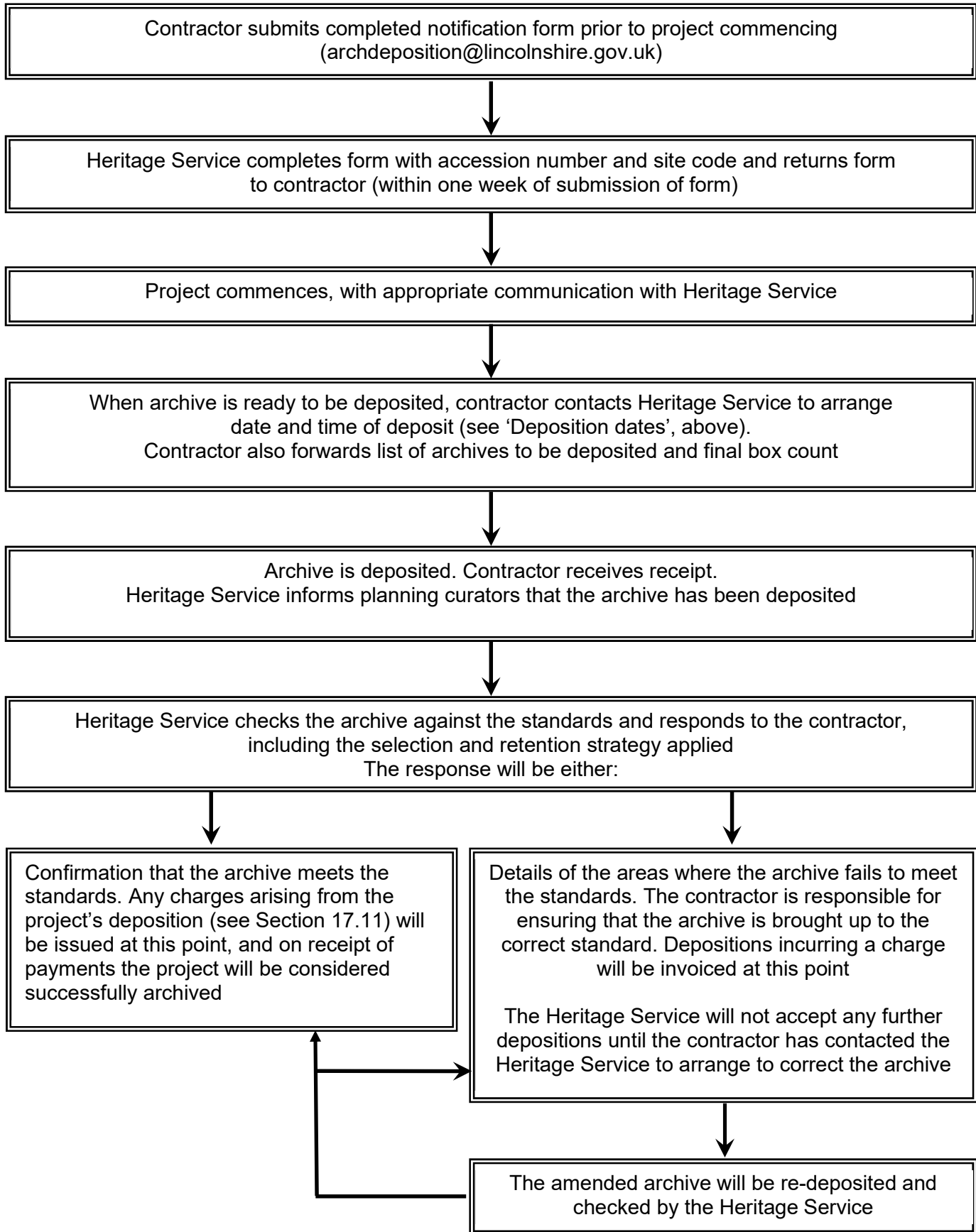
The first full week in June

The first full week in August

The first full week in October

The first full week in December

Depositions in these blocks **must** be booked in advance. Archives of exceedingly large size or unusual composition may be accepted outside of these blocks in exceptional circumstances, at the discretion of the Heritage Service. Deposition outside of these blocks purely to facilitate the fulfilment of planning conditions will not be allowed. It is the responsibility of contractors to factor these blocks into project planning.



17.6 CONSULTATION

The Heritage Service expects to be consulted in any major issues relating to the project, including but not exclusively:

- Changes to the project brief
- Abnormally large finds assemblages
- Significant finds assemblages or assemblages which will require increased levels of curation or conservation
- Decisions relating to levels of conservation required
- Conservation work above the levels required by this document, for example aesthetic improvement (see section 17.13)
- Prior to any destructive analysis of any element of the archive
- Significant changes to the proposed deposition date
- Decisions regarding the retention of human skeletal material
- Where any or all of the finds from the archive are to be retained by the landowner or transferred to a third party (including find specialists, universities etc.)
- Significant delays in the project timetable
- Transfer of the project to another contractor
- Projects that only partially lie within the Heritage Service's collecting boundary
- Cancellation of the project

The Heritage Service expects to be consulted on such issues at the earliest opportunity, so that integrated solutions may be sought.

17.7 FINDS SPECIALISTS

The Heritage Service expects that contractors will employ all relevant specialists necessary to interpret the site and the finds, including ceramics, small finds, environmental data and geophysical surveying. It is imperative for the interpretation of the site and the future value of the archive as a research resource, that finds are properly identified by a relevant specialist. Specialist advice may also guide conservation treatment and packaging (see sections 17.12 to 17.15). **The Heritage Service may refuse to accept an archive if relevant specialists' reports have not been commissioned.** The Heritage Service may also refuse to accept an archive if recommendations made in specialists' reports (such as for illustrations or further investigative work) are not carried out. The Heritage Service may refuse to accept material that a specialist has recommended be discarded.

The Heritage Service expects specialists' reports to be in a format and using terminology consistent with that currently in use in Lincolnshire.

17.8 SELECTION, RETENTION AND DISPERSAL

17.8.1 Retention and dispersal rationale

Decisions regarding the selection, retention and dispersal of archaeological material must balance two contrasting factors:

- The implicit need to create as complete an archive as possible, containing as much information as may be required to reinterpret the site in the future
- The realities of museum storage and the practical need to physically retain vast quantities of common and typologically identical material

The purpose of the selection process therefore, as summarised by the Society of Museum Archaeologists' guidance document 'Selection, Retention and Dispersal of Archaeological Collections' (1993) (hereafter referred to as SMA 1993) is:

- To enable a mass of finds and data to be quantified and interrogated more effectively
- To remove material of no perceivable information value and / or intrinsic interest
- To distil the information, research and utility values of an archive into a manageable and cost-effective archive, without compromising the archive's integrity

It is expected that a retention strategy will be proposed by the contractor before work begins on the site, which takes into account the wider archaeological landscape of the site. Any correspondence or rationales regarding the formulation and implementation of the strategy should be included in the documentary archive. The process of assessing and documenting objects for dispersal is a time-consuming and potentially expensive task. The Heritage Service expects contractors to show due diligence in devising retention strategies and expects that the both the intrinsic interest of an object (including potential for future research) and its contextual relevance will be taken into account. Stratification alone is not deemed a valid reason for either retention or dispersal. Unstratified material of intrinsic value (e.g. Pleistocene faunal remains or post Medieval material) must be considered on its individual merits.

Ferrous metalwork must not be discarded until it has been analysed by x-radiography (see section 17.14.1). For selection and dispersal of individual materials, the Heritage Service refers contractors to section 4 of SMA 1993. Sections referencing treasure trove should now be disregarded in favour of the Treasure Act 1996.

Any material discarded from the archive, either on site or during the post excavation phase, must be fully recorded and listed within the documentary archive, including the reason for and method of the dispersal (e.g. reburied, retained by landowner). The record must also include a full count and weight of discarded material. **Any registered finds not retained in the archive (e.g.**

retained by the landowner) must be suitably recorded in the archive with photographs or illustrations.

The Heritage Service expects that no material will be removed from an archive for retention by the contractor or a finds specialist (e.g. for inclusion in a type series) without prior consultation with the Heritage Service. In such instances, it is expected that, wherever possible, retained material will be selected from material that would otherwise have been discarded. **All material removed from the archive for such a purpose must be fully documented, and proxy cards placed in the appropriate archive boxes.**

In the case of material selected for destructive analysis, the Heritage Service expects that it will be consulted at the earliest opportunity, and before the analysis has occurred. The Heritage Service expects that comprehensive records of the object and the processes involved will be included in the documentary archive.

The Heritage Service reserves the right to refuse to accept an archive if it is felt that the selection, retention and disposal process has not been carried out to acceptable professional standards.

17.8.2 Human remains

In the case of human remains, the Heritage Service adheres to the Department for Culture, Media and Sport's document 'Guidance for the Care of Human Remains in Museums' 2005. In respect of human remains excavated from consecrated ground, the Heritage Service adopts the guidance set out by Historic England and the Church of England in 'Guidance for the best practice for treatment of human remains excavated from Christian burial grounds in England' 2005.

Unless there is requirement for immediate reburial (e.g. due to age or burial conditions), human remains are expected to be deposited with the Heritage Service in the following circumstances:

- Stratified articulated inhumations
- Stratified disarticulated inhumations (depending on the quantity and condition of bone present)
- Cremations

Unstratified human remains will only be collected in exceptional circumstances and these must be discussed with the Heritage Service prior to deposition.

Stratified remains suitable for retention and further study should be identified at the post excavation phase, on the recommendation of an osteoarchaeologist. The Heritage Service should be consulted in any discussion over the retention of human remains by third parties.

Reburial of human remains is the responsibility of the contractor, including liaison with coroners and registrars and all costs pertaining to ethical reburial. **The Heritage Service must receive, as part of the documentary archive, a record of the reburied material, the reasons for reburial, details of the location of the reburial site and copies of all correspondence.** For further guidance on best practice regarding reburial, contractors are directed towards section 4.4.1 of SMA 1993 and IFA paper No. 7 'Guidelines to the Standards for Recording Human Remains'.

Guidance on the packaging and marking of human remains can be found in section 17.16 of this document.

17.8.3 Sampling

The Heritage Service draws a distinction between two forms of sampling:

- Samples which are *examples* – retained from a group of similar objects, the remainder of which have been discarded (for example bricks from a wall)
- Samples which are *analytical* – taken from a bulk deposit for the purposes of identifying that deposit (for example mortar samples)

It is expected that, in the case of 'examples', the entire group will be collected and analysed before the sample is taken, to ensure that it is representative of the group and of an appropriate size.

The Heritage Service expects that any issues regarding sampling that arise during fieldwork will be discussed with all relevant parties, including the Heritage Service and the landowner. It is possible that material of lesser research value to the archive may be useful to the Heritage Service in terms of education material, and the Heritage Service is happy to discuss such material with contractors. Such education material is not considered part of the archive.

In the case of analytical samples, it is expected that any surviving samples subjected to analysis will be deposited with the archive along with the resulting report. Samples that are wet or stored in alcohol will not be accepted. Any samples taken but not analysed are not expected to be deposited with the archive, unless there are specific reasons for doing so. This must be discussed with the Heritage Service prior to deposition. It is expected that the contractor will carry out any and all analyses essential to the interpretation of the site.

17.8.4 Industrial processes

Sites producing evidence of industrial processes such as metal smelting, mining or smithing; glass working; ceramic or tile kilns; salt production; bone working; leather working or stone working (including prehistoric lithics) can produce vast quantities of material. Contractors are referred to section 4.2 of SMA 1993 for guidance on sampling such material.

17.8.5 Structural remains

The remains of buildings obviously cannot be included within the archive in their entirety. Contractors are referred to section 4.3 of SMA 1993 for guidance on sampling such material. It is expected that worked stone and stone with inscriptions, masons marks etc will be given particular consideration.

17.8.6 Disposal from completed archives

The Heritage Service reserves the right to discard archival material after its deposition. This disposal will be carried out within the bounds of the current Lincolnshire County Council policies covering collections access and development.

17.9 LEGAL TITLE

By law, all excavated material, with the exception of those items falling under the remit of the Treasure Act 1996, is the property of the landowner. The Heritage Service will only accept an archive if ownership has been formally transferred in writing to Lincolnshire County Council. A transfer of title form can be found in Appendix E. It is the contractor's responsibility to ensure that the person signing the transfer of title form has the legal authority to do so. The Heritage Service presumes to never purchase an archive, and will only accept an archive on loan in specific circumstances, such as excavations on Crown land, and only when the Heritage Service has been approached prior to deposition.

The contractor should attempt to obtain transfer of title before the project begins, though it is accepted that this is not always possible. When difficulty in obtaining transfer of title arises, evidence of multiple attempts to gain it, in the form of written evidence (dated emails or written letters) must be provided with the archive. The contractor must contact the Heritage Service as soon as a problem with transfer of title arises and no promises should be made to the landowner on the Heritage Service's behalf.

If significant objects or significant quantities of objects are retained by the landowner without prior consultation with the Heritage Service, the Heritage Service reserves the rights to either accept only the documentary archive or to refuse to accept the archive altogether.

The importance of retaining the integrity of the archive must be stressed to the owner, as must the fact that the archive is passing into public ownership for future research access, not remaining in private hands. The Heritage Service is prepared to discuss acceptance of partial archives, but the contractor must be able to demonstrate that efforts have been made to obtain the full archive.

17.10 COPYRIGHT

Copyright of the documentary archive will remain with the excavator and the authors of specialist reports. Lincolnshire County Council must be granted full licence to research, study, display, publish and provide public access to all the information and finds contained in the archive. It is the responsibility of the contractor to obtain such permission from sub-contracted specialists, and this should be written into briefs when employing sub-contractors.

The Heritage Service will acknowledge the originators of the archive in any utilisation of the material and will pass on to the originators any requests for publication of parts of the archive for anything other than academic journals.

The Heritage Service acknowledges that elements of the archive, such as Ordnance Survey maps and original illustrations may remain the copyright of third parties.

The Heritage Service will honour any reasonable confidentiality clauses placed on material within an archive, for example a time restricted non-publication clause.

17.11 CHARGING POLICY

The Heritage Service charges for the deposition of finds boxes, irrespective of the age of the archive. The charges are designed to cover the costs incurred by the Heritage Service to manage and curate the archive in the long term. **Charges are only made for finds boxes (both bulk finds and registered finds), not for documentary boxes.** An archive consisting solely of documentary material will therefore not incur a charge.

Charging levels will be reviewed on an annual basis. The charging level will be based on the costs incurred by the Heritage Service to manage and curate archives in the long term, and **it is the responsibility of contractors to ensure that they are using the latest charges when costing projects.** The current charges can be obtained by contacting the Heritage Service, or by looking at the 'Archaeological Project Archives' page of The Collection's website – accessible at:

www.thecollectionmuseum.com/?/about-us/archaeological-project-archives

The charges are based on 'full-size' and 'half-size' low acid bulk boxes (see Appendix C). Smaller boxes (e.g. registered finds boxes) and loose items (e.g. architectural stone) will be calculated to the equivalent volume of a bulk box and charged accordingly. Skeleton boxes will be charged as 'full-size' boxes. Charges relating to abnormally large objects with bespoke packaging will be discussed with the contractor at the point of deposition. **Any archive with finds will be charged a minimum of a single half sized box.**

Contractors are permitted to place smaller physical archives within previously deposited boxes as long as there is space and the inclusion would not cause the previous box to breach any of the guidelines set out in this document. **Additions to previously deposited boxes will not incur a charge.**

The Heritage Service reserves the right to waive any box charges for community and research excavations at its own discretion.

PART 2

FINDS ARCHIVES

17.12 CONSERVATION AND INVESTIGATION OVERVIEW

17.12.1 Stabilisation of the assemblage

A minimum basic requirement to enable deposition of an archive is to stabilise the assemblage to confer a level of long-term integrity to it, as described in currently accepted standards of best practice for the transfer of an excavation assemblage to a receiving organisation (e.g. MAP2, now incorporated within MoRPHE - Management of Research Projects in the Historic Environment, and other associated documentation), and also reflected in the local authority's planning and development control requirements.

The stabilisation needs of an archive are normally two-fold:

- Provision of appropriate packaging – including physical support and environmental control - necessary for long term storage
- Remedial treatment of actively deteriorating objects

Packaging

All items in an assemblage require an appropriate level of packaging. Packaging guidance is set out in detail in section 17.15. Further advice on packaging needs of an assemblage can be sought from the Heritage Service and/or an accredited archaeological conservator associated with the project.

Where contractors have followed guidance such as that contained within First Aid for Finds, they should note that such guidance is intended to advise on the needs of an assemblage during and immediately following its recovery from the burial site only. Such guidance does not cover all of the tasks required to render an assemblage transferable to the Heritage Service for long-term storage, and further evaluation of its needs will be required before the contractor's responsibility is discharged.

Remedial Treatment

Some items in an assemblage may require remedial treatment to recover unstable structures – for example damp or waterlogged material. Remedial treatment for these items must be carried out by an accredited archaeological conservator prior to deposition. Further guidance is set out in section 17.13.

Delivery of these two functions (Packaging and Remedial Treatment) fulfil the contractor's basic responsibility toward stabilising the archive prior to transfer of the archive to the Heritage Service.

17.12.2 Investigation of finds

Finds should also be fully interpreted and reported on prior to transfer, involving the appropriate specialists. To inform this work, further investigation of finds may be required to assist interpretation, particularly of those elements of the assemblage which have obscured morphology.

Commonly this is likely to involve the following:

- X-radiography
- Investigative Conservation
- Analysis

X-radiography

X-radiography will be undertaken in order to screen all aspects of morphology, for relevant groups of material. This will be carried out by someone with appropriate training/experience in the x-radiography of archaeological material, often an accredited conservator/practice.

X-radiography of certain groups is an essential requirement for archive transfer. See section 17.14.1 for further information.

Further Levels of Investigative Conservation Work and analysis

In some cases further levels of conservation work beyond remedial level may be required to aid interpretation. Further analysis may also be indicated. This will not apply to every object or project but is dependent on needs for further investigation that have been identified during the 'Assessment of potential for analysis' stage.

This work should be carried out prior to archive transfer by appropriate specialists and the results included in site and specialist reports. Further information is set out in sections 17.13 and 17.14.2.

17.13 CONSERVATION OF OBJECTS

17.13.1 Levels of conservation

Conservation (in this context defined as interventive work on archaeological objects) is generally described within three levels:

- Remedial Conservation
- Investigative Conservation
- Aesthetic Improvement

These can be defined as follows:

Remedial Conservation; treatment carried out to recover unstable conditions.

Investigative Conservation; selective intervention to investigate specific aspects of an object for research purposes.

Aesthetic Improvement; intervention to enhance an object and assist with interpretation for advocacy purposes.

17.13.2 Remedial Conservation

Unstable structures require recovery through remedial conservation. **This is an essential element of work that must be carried out prior to deposition.**

The assemblage should be referred to an appropriately qualified person for assessment, identification and recovery of all issues. Conditions that require treatment commonly include the following (but note this is not an exhaustive list):

Actively corroding metalwork – most commonly iron and copper alloy. Iron is especially susceptible to active corrosion upon excavation, particularly if environmental control is not tightly maintained. Active corrosion will be evident through the specific corrosion products that result and evidence of damage that occurs as this progresses – cracking, delamination, loss. Treatment to recover existing damage and measures to prevent further corrosion through provision of appropriate environments will be required.

Damp and waterlogged material – e.g. leather and wood. Any damp and waterlogged material that warrants retention in the archive and transfer to the Heritage Service. must be treated by an appropriate method. This is likely to involve firstly impregnation with a suitable bulking agent followed by an appropriate drying method and will probably have to be undertaken by a specialist. Other methodologies (e.g. air-drying alone) will not produce acceptable results in most cases and must be discussed with the Heritage Service before proceeding as such processes are irreversible. See the Historic England publication *Waterlogged Organic Artefacts* for further guidance.

Other material that might be in this condition and require a similar approach includes bone, textile, ivory, horn, antler, basketry, jet, shale, amber, glass, low-fired ceramic, composite (e.g. iron knife with wooden handle), etc.

Cracked, crumbling, delaminating structures – e.g. glass, bone, plaster, amber, ivory and any other item where there is evidence that the physical structure of the object is compromised with loss/potential for further loss.

Block-lifted material - there are a number of circumstances where an item or group of items might be recovered by block-lifting on site. These include waterlogged objects, fragile objects (e.g. low-fired ceramics, textile etc.), fragmented items (e.g. fractured glass/ceramic vessels, ivory rings etc.) and complex groups (e.g. bead groups, grave goods, hoards etc.). These must be dismantled and component parts recorded and treated as required before deposition.

Completion of remedial tasks does not usually involve "cleaning" or other aesthetic improvement work (unless it is a necessary part of remedial treatment), and objects will still generally be in an 'as-excavated' condition following work.

17.13.3 Investigative Conservation

Sometimes further potential works, such as investigative cleaning/reconstructions etc. may be requested by (for example) artefact researchers associated with the project. This might involve, for example, investigative corrosion removal to further clarify features highlighted on x-radiographs. If such work is identified and agreed as part of a further phase of the project (e.g. during assessment of potential/analysis phase), this would need to be done in addition to the basic minimum requirement. The Heritage Service expects that appropriate levels of investigation will be carried out to determine the identification, typology and function of an object, as well as the existence of decorative schemes.

17.13.4 Aesthetic Improvement

Improvement of the appearance of an object for aesthetic reasons (sometimes referred to as 'full cleaning' or 'display level conservation') is not usually a requirement within the planning and development context and would not normally be a requirement for archive transfer.

Where such work does take place, note that within this level of conservation work there will options and a decision-making process regarding the exact work undertaken ('full cleaning' can be a misleading term in this respect). A project specification will be required for discussion with the conservator contracted to carry out the work.

If such work is considered for a specific project – e.g. for a public event or temporary display organised by the developer or contracting unit – this **must** be discussed with the Heritage Service to ensure decisions and project specifications also suit the Heritage Service's future responsibilities towards an object or archive and future advocacy needs.

17.13.5 Additional points

Conservation reports must be provided for all objects that have undergone any level of conservation (remedial, investigative and aesthetic). The reports must include methodology, results and materials used.

Where corrosion removal is undertaken as a secondary phase of work, this will generally require an adjustment to packaging to ensure suitable support. Objects are often more physically vulnerable following this type of work and likely to require greater levels of support through provision of bespoke packaging. **Where there is a need for adaption/replacement of packaging this must be carried out prior to archive transfer.**

The Heritage Service will not accept cost as a valid reason for not carrying out relevant work (unless in exceptional circumstances) and reserves the right to refuse to accept an archive if it is not satisfied with the level of work commissioned by the contractor. Communication with the Heritage Service should occur at the earliest opportunity if the contractor is in any doubt as to the level of investigation required for a specific object.

7.14 INVESTIGATIVE TECHNIQUES

7.14.1 X-radiography

Screening the assemblage (or appropriately selected sections of it, such as metalwork) via x-radiography will be undertaken to clarify morphology where this is obscured by the processes of deterioration/burial. This non-invasive method will reveal the form and structure of an object as well as other significant details and forms a permanent long-term visual record of the objects. **It is an essential part of the site archiving process.**

What to X-ray

This **must** be undertaken for **all iron** in the assemblage (both registered and non-registered finds).

X-radiography will also be required for **most** other metalwork and also some other components of an assemblage – e.g. block-lifted groups, vessels with contents, composites with metal components etc.

It may not be required in specific circumstances, where information would be limited e.g. thick and chunky lead alloys, some copper alloy finds with no accretion (e.g. from waterlogged deposits), obviously modern easily identifiable objects.

It should be carried out on any part of the assemblage where there is potential for the technique to reveal hidden information that will aid understanding and interpretation of the finds. Including:

- object identification/type

- form and shape
- level of deterioration
- surface features and decoration
- technological detail (e.g. manufacture and associated processes)
- relative positions of components/objects (particularly block-lifted finds, vessel contents)

How to X-ray

Generally all objects will need to be imaged using multiple incremental exposures (varying exposure time and/or energy of the beam) and also through precise and specific rotations, producing a series of images of each object. This will screen all aspects of morphology, including outermost corrosion/burial debris to reveal even subtle evidence. A more limited approach may be acceptable in certain circumstances, e.g. for very large groups of clearly identifiable nails, where screening without rotations would enable the identification of any items worth further study.

Plates should be clearly labelled, distinguishing between the various views and exposures and identifying multiples parts and groups of objects. Sites should always be X-rayed on separate plates and plates should not be cut to separate objects or remove blank space.

Notes

The Heritage Service expects to be consulted on which sections of the assemblage require x-radiography and to what level, for the purposes of long term curation and public interpretation.

All x-radiography must be completed (and the results interpreted) prior to archive transfer.

A full set of x-radiographs must be included in the archive.

A quality control system should be in place for both the exposure and processing of x-radiographs.

X-radiographs must be marked and packaged appropriately (see section 17.17.8)

Refer to the Historic England publication *Guidelines on the X-radiography of Archaeological Metalwork* for more detailed information.

17.14.2 Other analyses

The need for further analysis may be identified for some artefacts during the 'Assessment of potential for analysis' stage (e.g. X-ray Fluorescence, oxygen isotope analysis). Some types of analyses (e.g. microstructural) are destructive in nature. The Heritage Service expects that it will be consulted at the earliest opportunity where the potential for such analysis has been identified, and before the analysis has occurred.

The Heritage Service expects that comprehensive records of the object and the processes involved will be included in the documentary archive.

All analysis work should be completed prior to archive transfer, and objects re-incorporated into the site archive.

17.15 OBJECT PACKAGING

17.15.1 Principles of packaging

Material comprising the physical archive will be packaged differently depending on its material and condition. Specific packaging guidelines are provided below, but some general packaging principles apply to all elements of the object archive:

- All bags and boxes must be marked directly in lightfast and waterproof permanent black marker pen with the accession number, site code, context number, registered find number (if applicable) and the material contained. **All boxes must be marked on two sides of the box, one long side and one short side.** Do not use adhesive labels. Paper contents lists placed inside boxes are not an acceptable substitute for marking the box exterior.
- Polythene-style boxes must be suitably robust, airtight, stackable and of a suitable size (see Appendix C). For example, takeaway-style boxes would not be acceptable.
- Always use conservation grade materials such as acid free tissue, plastazote, ethafoam and correx. Consult an accredited archaeological conservator or the Heritage Service if unsure how to obtain or use these materials
- All items should be placed within their own space within a box. Suitable padding and space within a box is likely to be adequate protection for most items.
- Where items need more protection, foam may be added to finds bags.
- Never roll or wrap an object, for example in acid free tissue.
- Bags and foam should be of a suitable size to not compromise access to the object/s. It should be easy to remove objects from the bag. Any delicate or fragile object that may be damaged through use of a bag and foam should be provided with more appropriate protection, such as a box.
- Never pad out half full boxes with packaging chips, bubble wrap or newspaper
- Bespoke packaging might be provided in a variety of ways. For example cushioning with acid free tissue in a box or construction of a customised box and foam support. **Appropriate conservation grade materials must be used for the construction of bespoke packaging.**
- Objects should be accessible and easy to extract from and replace in its packaging. Where appropriate, space should be provided around objects to enable them to be picked up, e.g. finger holes in foam.
- Boxes should not be overfilled with objects or packaging, to avoid the risk of crushing.
- No individual box should weigh more than 7kg

17.15.2 Bulk finds - non-sensitive

The majority of material such as pottery, building material and animal bone will be considered as bulk non-sensitive finds. Any bulk items of a more sensitive or diagnostic nature, as detailed below, require greater physical protection.

Bulk non-sensitive material should be washed and stored in re-sealable pierced polythene bags within low-acid cardboard boxes (see Appendix C for acceptable box dimensions).

Material from more than one archive may be stored in the same box but must be separated within the box, and the box marked accordingly. However, contractors must make all efforts to keep different sites boxed separately.

Finds from larger sites should be boxed by material type. For small sites, e.g. watching briefs, different materials may be boxed (but not bagged) together, provided that more delicate material is provided adequate protection and that boxes are not overfilled.

Finds in boxes should be arranged in context order. Under no circumstances should different materials be bagged together, even when from the same context.

There may be occasions where bulk objects are not stored with their contexts, for example where material has been extracted for publication or illustration or where parts of a single object have been found in different contexts and subsequently re-joined. Proxy cards should be placed in the context boxes from which the objects have been taken.

The species of bulk animal bone should be marked on the bag when feasible, and on the outer cardboard box where space permits.

All bulk ceramics must be bagged according to their ware type, using established codes used by Lincolnshire ceramics specialists. The specialists should be contacted directly for any queries regarding use of these codes.

17.15.3 Bulk finds - sensitive

Distinction needs to be made between sensitive bulk material and registered finds. The term sensitive bulk finds is used to refer to bulk material of a more diagnostic or physically delicate nature that requires a greater degree of protection than non-sensitive bulk finds.

Sensitive bulk finds may need additional physical protection than is generally required for bulk finds. Some examples are listed below. This list is not exhaustive; all bulk assemblages should be screened to identify items that need additional protection.

Sensitive bulk finds might be stored in a separate smaller box either within the main low-acid bulk box or separately. Separate boxes must be labelled as described in section 17.15.1, above. See sections 17.12 and 17.13 for further information on the conservation of objects.

**The following, once given additional protection, can be placed
inside the main non-sensitive bulk boxes**

Small mammalian, avian or piscine bones should be packed in small boxes by species and labelled.

Friable and fragile ceramics need special attention. They should be provided with adequate physical protection but still following all other instructions regarding marking and storing according to context and ware type.

Any sharp, thin or otherwise fragile **glass** should be provided with adequate physical protection, generally in a smaller box, or at least with sufficient padding. Painted or otherwise decorated glass should always be packaged in a separate box – see below.

Friable and fragile shell should be provided with adequate physical protection. Particular care must be taken with very small shells that may be crushed by other bulk material.

Charcoal samples should be provided with adequate physical protection, generally in a smaller box to prevent it being crushed by other material.

**The following must be packaged separately according to the specific instructions below, and
not placed inside the main low-acid bulk box**

Human skeletal material. This should be placed within a skeleton box (see Appendix C), bagged by skeletal area. Upper and lower limb bones separately on each side, axial skeleton, hands and feet individually and the skull carefully supported and placed in a separate skull box (see Appendix C). If the skull is fragmentary, it may be bagged within the main skeleton box. Care must be taken to protect more fragile bones from damage, through the positioning of bones in the box and the insertion of protective foam where necessary. **No more than one individual should be placed in a single box** without prior consultation with the Heritage Service.

Metals. All metals (and associated material, e.g. **slag**) must be treated as sensitive and packaged sympathetically to their condition. They should be placed in labelled polythene bags within sealed polythene boxes. Different metal types (e.g. iron, copper alloy) should be stored separately. It is not expected that bulk metals will be packaged to the same level as registered metal finds, for example multiple objects may be placed in the same bag. The effects of physical abrasion on such objects

must be considered and the objects provided with adequate protection to ensure their survival, even though they are bulk objects. **Bulk metals should be packaged separately from registered metallics**, and must be packaged with an appropriate amount of silica gel and a humidity indicator card. Advice should be sought from the Heritage Service if in doubt over the packaging of bulk metallics.

Leather. Bulk leather objects should be packaged sympathetically to their condition, stored in bags within sealed polythene boxes. All leather must be appropriately treated before deposition.

Waterlogged leather will not be accepted.

Complete or near complete ceramics, including those found to be so after reconstruction, should be separately packaged according to their need, using low-acid card boxes or custom packaging where necessary. Bubble wrap or packaging chips should never be used to support ceramics in the box.

Wood is unlikely to survive in such quantity that it will be treated as bulk material, but if this is the case, it must be packaged with consideration for its condition. This will include smaller pieces being placed in polythene bags and then inside polythene boxes. Larger or unusually shaped pieces will require bespoke packaging. Advice should be sought from the Heritage Service if there is any doubt over the suitability of packaging. Wood must be appropriately treated prior to deposition. **Wood will not be accepted by the Heritage Service if it is still in a waterlogged condition.**

Painted/Decorated Glass would generally be expected to be registered, but if it is not it should be placed in a polythene box with suitable bespoke support. Wrapping in tissue paper in a polythene bag would not generally be considered suitable.

Environmental samples, e.g. flots, thin sections, metallographic samples should be stored using suitable inert materials (e.g. polythene boxes, glass jars). Packaged samples should be grouped together into an appropriate outer box. Any specific storage guidance supplied by specialists should be adhered to. Environmental conditions should be maintained as appropriate for the sample material type (see section 17.15.5). Unprocessed, wet, or samples stored in alcohol will not be accepted.

17.15.4 Registered finds

These include finds that are registered on site and those that are considered to be worthy of registration in hindsight (see below). For the purposes of packaging, all registered finds should be treated as sensitive. Registered finds must be fully assessed to identify bespoke packaging needs.

If there is any doubt as to the correct method for packaging of registered finds, advice must be sought from the Heritage Service or an accredited archaeological conservator. Sections 17.12 and 17.13 set out conservation requirements in more detail.

Different materials should be boxed separately. All objects must have their own individually labelled packaging (e.g. polythene bags or boxes) within the outer sealed polythene box. The effects of physical abrasion on such objects must be considered and the objects provided with adequate protection to ensure their survival. Larger registered finds (e.g. stone and complete ceramics) must be provided with suitable bespoke packaging. **Finds in boxes should be arranged in registered find number order.**

Provision of suitable microclimates within registered finds boxes is essential. Refer to section 17.15.5 below.

On very small sites, it is possible to group items registered and sensitive bulk finds of the same material together to maximise storage efficiency. This must be discussed with the Heritage Service in advance. Different material types should not be stored in the same box except in the case of composite items (e.g. an iron knife with a bone handle). Guidance should be sought from the Heritage Service or an accredited archaeological conservator if there is any doubt over the most suitable packaging or environment for composite material.

All bags and boxes should be marked with the accession number, site code, context, registered find number and, where appropriate, x-ray film number. Where appropriate for singly packaged items, an image of the object should be placed on the outside of the box.

17.15.5 Environment

It is important that sensitive bulk and registered finds are provided with suitable environments for their long term preservation. Suitable environments within boxes must be provided at the point of deposition, as detailed below. Consult the Heritage Service or an accredited archaeological conservator if in any doubt as to the suitable environmental conditions or controls required.

Any humidity control (e.g. silica gel) within a box must not be placed on top of objects and should be easily accessible for replacement.

The table below lists the ideal conditions for common archaeological materials.

Material	Relative Humidity (RH)
Ferrous metal	<15%
Non-ferrous metal	<35%
Bone	40-60%
Glass	40-60%
Ceramic	40-60%
Jet / shale	40-60%

Leather (post treatment if waterlogged)	40-60%
Wood (post treatment if waterlogged)	40-60%

Types of environmental control and monitoring that might be required include:

- **Desiccated silica gel** (silica gel which is supplied dried out and is very efficient at adsorbing water from the air at low RH (below 45%). Used to produce very dry conditions)
- **Buffered / conditioned silica gel** (silica gel that is supplied having been conditioned to a specific RH. It controls changes to relative humidity by absorbing and desorbing water vapour from surrounding air. It is used to maintain conditions to a specific relative humidity within a mid-range RH (e.g. 50%)
- **Humidity indicator card**. This must cover the full scale from 0% to 100%
- **Oxygen scavengers** (sachets used to create very low oxygen environments within sealed packaging)

The Heritage Service will not accept the following:

- Self-indicating silica gel
- Loose silica gel in boxes
- Silica gel in glued and/or paper sachets (only stitched fabric sachets will be accepted)
- Silica that has been previously used (unless regenerated)
- Multiple very small sachets (e.g. those typically found in shoe boxes and electrical product packaging)
- Humidity indicator cards with a reduced range (e.g. 20% - 60%)

Consult the Heritage Service or an accredited archaeological conservator for advice on identifying such objects and determining their individual requirements.

Using silica gel in boxes

The silica gel quantity required to maintain an appropriate microclimate in a box long-term depends on a number of factors, such as the size of the box, the type of contents, room conditions when the box is sealed, frequency of access etc. However as a general guide, silica gel should be added to containers at a minimum of the following ratios. The environment in the box should be monitored to ensure required conditions are maintained. Silica gel should be replaced as often as necessary to maintain conditions.

- Desiccated silica gel should be added to boxes at a minimum ratio of 30gms/litre (1000cm³)
- Buffered silica gel (e.g. ProSORB) should be added to boxes at a minimum ratio of 4gms/litre (1000cm³)

Ferrous and non-ferrous metals

Ferrous and non-ferrous metals must be placed within a well-sealed polythene box. All boxes should be provided with an appropriate amount of desiccant (silica gel), determined by the volume of the box and according to the formula below. A humidity indicator card must be placed within every box so it is visible without the need to open the box.

Non-metallic objects

All registered non-metallic finds and relevant sensitive bulk finds must be stored in a well-sealed polythene box. A humidity indicator card must be placed within every box so it is visible without the need to open the box. Desiccant must not be used.

Vulnerable objects

Some particularly vulnerable objects will require additional environmental controls. Some examples are:

- Composite objects (e.g. bone and iron). May require buffered / conditioned silica gel to a specific humidity
- Ivory and very unstable bone. May require buffered / conditioned silica gel to a specific humidity
- Very unstable iron. May require an oxygen scavenger

Care of finds prior to deposition

The Heritage Service expects that sensitive bulk and registered material will be kept in suitable environmental conditions from as soon as possible after excavation until its deposition in the Heritage Service. As well as the provision of microclimates (as detailed above and in guidance such as First Aid for Finds), the environment in contractor's storage areas is also important. This should be stable, protected from extremes and fluctuate as little as possible. The changes in temperature between day and night can be particularly problematic as temperature also directly affects humidity.

Environments within boxes should be monitored using humidity indicator cards and silica gel must be replaced whenever necessary until the archive is deposited. **Material that has been allowed to deteriorate, even after conservation treatment, through poor storage environments will not be accepted by the Heritage Service.**

The physical security of objects is also of paramount importance, and the Heritage Service expects that objects will be stored in secured spaces, not openly accessible to visitors.

Contractors are also directed towards IFA Paper No. 8 'Disaster Management Planning for Archaeological Archives' for further practical advice on safeguarding archives prior to deposition.

17.16 OBJECT MARKING

17.16.1 Principles of object marking

Sections 17.15 (finds) and 17.17 (documentary) detail what information should be applied to the outer packaging for each element of the archive. This section outlines procedures for the physical marking of objects within the archive, in accordance with procedures set out by the Museum Documentation Association guidance document 'Labelling and Marking Museum Objects'.

All objects should be marked when possible, though the method used to mark different materials differs and is set out below.

Ideally, marks made on objects should be:

- **Secure.** The chances of accidental removal of the mark must be remote
- **Reversible.** It should be possible to intentionally remove a mark from an object, even after 50-100 years, with little or no trace of the mark remaining
- **Safe for the object.** Neither the materials nor the technique used to apply the mark should put the object at risk
- **Discreet but visible.** The position of the mark must not obscure detail on the object or spoil its appearance. It must however, be able to be seen without undue handling of the object
- **Safe for staff.** The materials used to apply the mark should be safe for the person applying it and subsequent users, if relevant health and safety guidelines are followed.

Some materials should never be used to mark museum objects. These specifically include correction fluid (e.g. Tippex™), nail varnish and nail varnish remover. These should never be used as alternatives to conservation grade materials.

17.16.2 Object marking requirements

The Heritage Service expects that specific object types within the archive should be marked by the following means. Please note that decisions regarding marking should be made with regard to the condition of the individual object. Please consult the Heritage Service or an accredited archaeological conservator if there are any doubts over the marking of an object.

All individual bulk finds, including ceramic sherds, stonework and animal bone should be marked with the site code or accession number and context number, if the object is in a condition to be marked. Ceramic sherds should be marked on the body of the sherd, not on the broken edges and in a contrasting colour to the sherd's fabric. Bulk finds need only be marked with ink, not with paraloid.

Registered finds must be physically marked with the site code / accession number and registered find number, unless they are of a small or fragile nature. Examples of objects not expected to be physically marked would include corroded ferrous material and coins.

Material	Marking technique
Animal bone	Mark with ink
CBM	Mark with ink
Ceramics	Mark with ink
Clay pipe	Mark with ink
Coins and tokens	Do not mark
Copper alloy (except coins and tokens)	Mark with paraloid and ink, if suitable (see section 17.10)
Glass (vessel and window)	Mark with paraloid and ink, if suitable (see section 17.10)
Human bone	Do not mark
Iron	Mark with paraloid and ink, if suitable (see section 17.10)
Jet / shale	Mark with paraloid and ink (see section 17.10)
Lead	Mark with paraloid and ink, if suitable (see section 17.10)
Leather	Do not mark
Stone (architectural)	Mark with ink or paint
Wood	Do not mark

17.16.3 Locating the mark

The following considerations should be borne in mind when locating a mark on an object:

- Avoid physically unstable surfaces, or marking across an existing break or crack
- Avoid decorated, painted, pigmented, varnished or waxed areas

- Choose a position that is not likely to be visible if the object is placed on display, for example away from areas of detail or decoration
- Avoid areas where the mark is at risk from abrasion from packaging or handling
- Mark all detachable parts of an object
- As far as possible, standardise the positioning of marks on similar objects

17.16.4 Suitability of an object for marking

The standard method for marking registered archaeological objects is with paraloid and drawing ink. This process is detailed in section 17.16.5. Bulk finds can be marked directly with drawing ink.

Some objects are unsuitable for permanent marking with ink, depending on a number of factors. If in doubt over the suitability of an object, assess the condition of the object against the table below, determining whether the object scores 'low', 'medium' or 'high' against the categories listed in the column on the left.

-	Low	Medium	High
Physical surface stability	Cannot mark without disturbing the surface	Can mark without disturbing the surface	Tape tied loosely around loop etc. in object will not cause surface material to be disturbed
Physical strength (resistance to tensional forces)	Object likely to be damaged if moderate force applied to tied-on label	Object unlikely to be damaged as long as force applied to tied-on label is not enough to break attachment/ adhesion	Object unlikely to be damaged even if force applied to tied-on label is enough to break attachment/adhesion
Porosity	Significant quantities of acetone-based paraloid will not be absorbed into surface on application	Significant quantity of paraloid will be absorbed but more viscous adhesives or acrylic mixtures will not	Significant quantity of viscous adhesive and acrylic mixtures would be absorbed on application
Roughness	Writing on surface is easy	Writing on surface is possible but more difficult	Writing on surface is impractical
Flexibility	Does not bend in normal handling	Bends, but not enough to cause paraloid or ink layer to crack	Bends enough to cause paraloid or ink layer to crack, e.g. cloth, leather

Then compare the results with the table below. If the object does not meet the criteria for 'drawing ink and paraloid', one of the other options below may be more suitable.

-	Surface materials	Physical surface stability	Physical strength	Porosity	Roughness	Flexibility
Drawing ink and paraloid	Not painted, waxed, varnished, pigmented,	Medium - high	Any	Low	Low-medium	Low-medium

	plastic or leather					
Loose label	Any	Any	Any	Any	Any	Any
Tie-on label	Any	High	High	Any	Any	Any
Paint	Not painted, waxed, varnished, pigmented, plastic or leather	Medium - high	Any	Low (oils) Medium (acrylics)	Low-medium	Low-medium

Organic materials should never be marked with ink and paraloid. Paint should only ever be used on stone and architectural ceramic. Tied on labels should take the form of Tyvek® labels attached with non-bleached cotton tape. Labels should be attached with care to non-delicate elements of the object. Always consult the Heritage Service or an accredited archaeological conservator if in any doubt about marking and labelling techniques, materials or positioning.

17.16.5 Marking an object

If an object is suitable for marking with ink, the following procedure should be followed for registered finds (bulk finds require only steps 7 and 8):

- 1 Moisten a cotton bud with a small quantity of acetone and remove any excess
- 2 Roll the cotton bud over the area to be marked, making sure that it is as small an area as possible. This cleans the surface
- 3 Wait for 30 seconds for the acetone to evaporate. If any adverse effects are noticed, contact an accredited archaeological conservator for advice
- 4 Mix a solution of Paraloid B72 granules in acetone at 20% weight to volume (e.g. 20g Paraloid in 100ml acetone). Wait for the granules to dissolve. Store in an airtight container
- 5 Apply a thin layer of the Paraloid / acetone solution to the object with a small brush
- 6 Allow to dry for 5 minutes
- 7 Apply the number using drawing ink. **Use white or black ink depending on the colour of the object**
- 8 Allow 15 minutes for the ink to dry
- 9 Apply a second layer of Paraloid / acetone solution to seal the ink
- 10 Allow to dry for 5 minutes

If at any stage you need to remove any paraloid and ink, use a cotton bud dipped in a small amount of acetone. Acetone can also be used to clean brushes and thin the Paraloid / acetone mixture (though drying time may be increased).

Remember that the Paraloid / acetone mixture is flammable and must be appropriately stored. Its use should always be in accordance with the contractor's own Health and Safety risk assessment / COSHH assessment etc.

PART 3

DOCUMENTARY ARCHIVES

17.17 THE DOCUMENTARY ARCHIVE

17.17.1 Documentary archive marking

All paper material must be marked with the accession number and site code, in different places on the page if possible. These should be made using permanent ink, pencil, ink stamp or be printed as part of the document. Documentary archives must be placed within appropriate boxes (see Appendix C) and marked clearly with the words 'DOCUMENTARY ARCHIVE' along with the site code, accession number and site name **on two sides of the box** (one long side and one short side on rectangular boxes). The outside of the box should be marked with an appropriately sized permanent black marker pen.

Documentary material from multiple archives may be placed within the same box to save space. However, all of the archives contained within must be listed on the box, and the archives must be easily distinguishable within the box and contained within their own folders.

The documentary archive consists of all material associated with the project, but not the artefacts themselves. The contents of the archive must be indexed and pages or sections numbered and cross referenced.

17.17.2 Documentary Archives contents

Every archaeological site is different, but the following provides a guide to the most common contents of a documentary archive

Site archive:

- Copies of correspondence relating to fieldwork
- Survey reports
- Site notebooks / diaries
- Original context records
- Site drawings
- Original finds records
- Records of conservation undertaken during fieldwork
- Original sample records
- Original skeletal records
- Digital media (see sections 17.17.8 and 17.17.9 below)
- Full site matrix
- Summary of context record
- Summary of artefact record
- Summary of environmental record
- Preliminary conservation assessment
- Summary of the nature and quantity of the total archive by type

Post excavation assessment archive:

- Context information
- Photographic catalogue (including one digital copy, see section 17.17.9)
- Photographic record (original photographs or digital contact sheet, including one digital copy of any digital images, see sections 17.17.8 and 17.17.9)
- Stratigraphic drawings
- Object catalogues (including one digital copy, see section 17.17.9). See section 13.4 of the Lincolnshire Archaeology Handbook for details of what the object catalogue should contain.
- Object drawings
- X-rays and catalogue
- Conservation records
- Site narrative
- Specialists reports (including one digital copy, see section 17.17.9)
- Records of any material disposed of during sampling, retained by the landowner or a third party, or retained by contractors or specialists (e.g. for type series)
- Records of items selected for destructive analysis

Other documentary material:

- An index to the contents of the archive (including one digital copy, see section 17.17.9)
- All original material produced as part of the preparation of the final report
- The final report (two printed and securely bound copies and one digital copy, see section 17.17.9). **The front cover of the report must include the Heritage Service 's site code and accession number**
- Additional or subsidiary reports such as geophysics and building surveys (1 printed and bound copy and one digital copy, see section 17.17.9).
- Site summary containing administrative details about the site
- Transfer of title, or correspondence showing attempts to obtain transfer of title (see section 17.9)
- Home Office licenses for the excavation of human skeletal material
- Details of reburied human skeletal material
- Details of material not included with the archive (i.e. retained by landowner or stored elsewhere)

Further guidance on the creation of documentary archives can be found in the UKIC publication 'Guidelines for the Preparation of Excavation Archives for Long-term Storage' (1990).

17.17.3 Documentary archive materials

All documentary archival material must be presented in a manner and in media that promote their long-term preservation. In particular, the following guidelines must be followed:

- Ferrous metal fastenings should not be used (staples or paper clips). Brass staples may be used instead
- Treasury tags may be used, but they must be plastic, not metal
- Elastic bands or adhesive tape should not be used to hold rolled material. Use unbleached cotton tape instead
- Papers should be stored flat and unfolded in appropriate archive boxes (see Appendix C)
- Papers must be stored within low acid folders, not ordinary office stationary folders
- Papers must **not** be presented in ring binders or box files

17.17.4 Drawings and plans

- Drawings must be on polyester based film
- Drawings must be on regular sized film (no smaller than A4 or larger than A0)
- Drawings must identify the subject, include a scale and, where appropriate, a means of orientation (e.g. compass rose)
- Any necessary key or colour coding must be marked on the drawing
- Original drawings on film must be in hard pencil (at least 4H) and not inked over
- Multiple drawings must be separated in the archive with low-acid card or low-acid tissue paper
- Do not use adhesive tape of any kind on drawing film
- Plans should be rolled rather than folded and stored in low acid tubes or low acid cardboard boxes if the plans will fit (see Appendix C)
- Rolled plans must be clearly marked with the site code and accession number, **visible on the outside of the roll**
- Drawings and plans that are born digital should be printed and included in the archive where appropriate, and digital copies provided with the archive

17.17.5 Photography overview

Site photography will be accepted in traditional (film) formats and in digital format, adhering to the quality standards set out below.

Whatever format is used, both digital and hard copy (thumbnails / contact sheet) versions of images must be provided, as set out in sections 17.17.6 to 17.17.8.

All record photographs must identify the subject, include a scale and, where appropriate, a means of orientation (e.g. compass rose). Where necessary, site and object identifiers must also be included.

17.17.6 Traditional film photographs

- Film must be developed by a professional processing company and must meet British Standard BS5699
- Photographic prints must be stored in archival quality low acid paper enclosures or polyester sleeves
- Photographic prints and their holders must be marked (on the reverse) with the site code or accession number, object number (if appropriate), film number and frame number using 2B pencil (not ink)
- A photographic index must be provided as an overview to all photographic material in the archive, one paper copy and one digital copy
- Polaroid film is not acceptable for archival photographs
- Digital versions must be provided in TIFF or JPG format. Image filenames must reference the site code or accession number and the individual image number.

17.17.7 Transparencies (slides and negatives)

- Transparency mounts should be marked, not the film, using lightfast and waterproof ink.
- Transparencies should be stored in archival quality storage holders, marked with the site code or accession number, object number (if appropriate), film number and frame number using lightfast and waterproof ink.
- Digital versions must be provided in TIFF or JPG format. Image filenames must reference the site code or accession number and the individual image number.
- A photographic index must be provided as an overview to all photographic material in the archive, one paper copy and one digital copy

17.17.8 Digital photographs

- Digital photographs must be of a suitable quality, and taken at the highest resolution available to contractors.
- TIFF is the preferred file format for preservation purposes, but JPG images will also be accepted. JPGs must be taken at the highest possible quality setting (e.g. 'superfine') to minimise image compression errors. Images should also be saved to the highest quality setting in photo editing software (e.g. not compressed). Original camera images should be provided alongside any edited images.
- Colour sheets with thumbnails of all images in the archive must be provided on archival quality low acid paper and appropriately marked.
- Image filenames must be changed to reference the site code or accession number and the individual image number. Images retaining camera generated filenames will not be accepted.
- A photographic index must be provided as an overview to all photographic material in the archive, one paper copy and one digital copy.

17.17.9 Digital Media

Digital media are rapidly becoming the preferred option for the production and storage of many elements of the archive, but **submission of a fully digital archive is not acceptable**. As stated in section 17.17.2, the Heritage Service expects digital copies of the following elements of the archives to be provided digitally **in addition** to the paper copies in the documentary archive:

- Index of archive contents
- Final report
- Subsidiary reports
- Specialists reports (eg finds specialists reports, geophysical surveys, scientific analysis of samples, human remains reports)
- Object catalogues
- Details of objects discarded from the archive
- Photographic catalogue
- Digital photographs and the photographic index
- Born digital maps, plans and reconstructions (hand drawn maps and plans do not need to be provided digitally)

These will be transferred on to the Heritage Service's servers for ease of future reference and research. The Heritage Service's baseline operating systems at the time of writing are Windows 7 and Office 2010, so all files must be in formats readable on such machines. The Heritage Service also refers contractors to the guidance

prepared by the Archaeological Data Service in the document 'Digital Archives from Excavation and Fieldwork Guide to Good Practice, Second Edition'. **Digital media submitted to the Heritage Service must also be submitted to ADS and the OASIS database.** Guidance on dissemination of digital data can be found in the Historic England document 'MoRPHE Technical Guide 1: Digital Archiving and Digital Dissemination' (2006).

The following file formats should be used:

Data Type	Formats
Reports	PDF, PDFA, DOCX, DOC
Finds catalogues	DOCX, DOC, XLSX, XLS, PDF, PDFA
Specialists reports	PDF, PDFA, DOCX, DOC
Images	TIFF, JPG
CAD	DXF, DWG
Databases	ASCII delimited text
Geophysics	AGF, plain text (data + control info)
GIS	ArcInfo, DXF, DWG
Moving Image	MPEG
Virtual Reality	VRML 2.0

Physical elements of the digital archive, such as CDs and DVDs, must be marked with the site code or accession number, using a water-based marker pen. Alcohol based pens should not be used as they may damage the disk in the long-term. Disks must be presented in individual cases. **File names for digital media are left to the discretion of contractors, but must reference the site's accession number or site code.**

When saving data onto CDs and DVDs, certain brands are known to produce better quality products for archiving purposes. These are TDK, Verbatim, Mitsubishi, Kodak Gold, Taiyo Yuden and Mitsui. These brands are preferable when submitting digital material. Files may be presented on a USB flash drive ('datastick') but please note that it is not possible for the drive to be returned.

17.17.10 X-radiography

Film sizes 18 x 24cm and / or 24 x 30cm should be used as appropriate to the assemblage/objects.

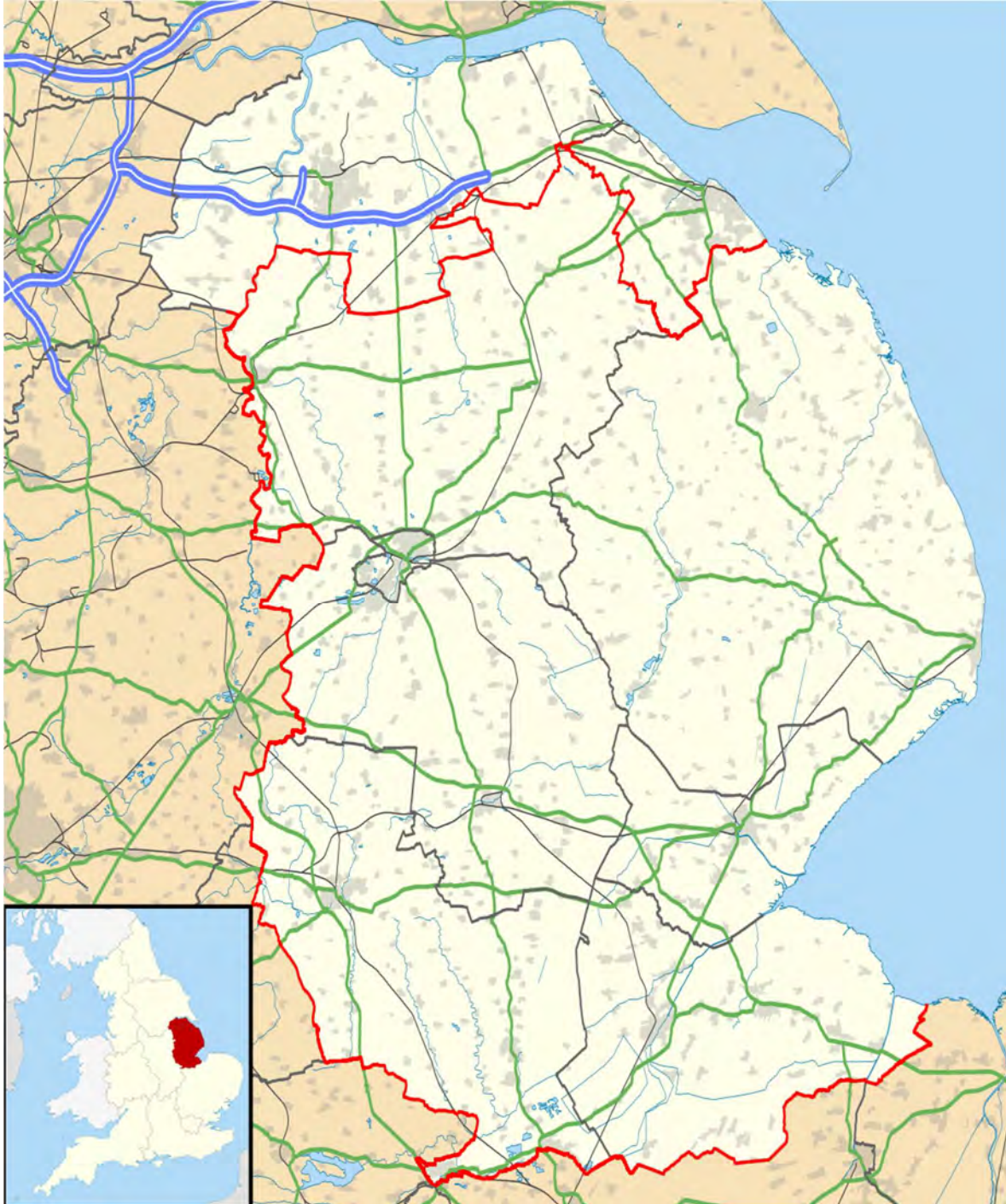
X-radiographs should be marked/stored in accordance with Historic England *Guidelines on the X-radiography of Archaeological Metalwork, 2006*. In summary:

- X-rays should be marked (normally using white ink or lead lettering of an appropriate size) with site details, film number, accession numbers, indication of orientation of artefacts and any other relevant information
- The information marked on the x-ray film should also be recorded on the outer sleeve, along with information on exposures, using archival quality ink (e.g. it should be water and light resistant)
- Each film should be protected from damage by enclosing it in a transparent polyester sleeve and then placing it in an low-acid outer envelope / sleeve
- Ensure plastic sleeves are of archival quality (e.g. do not use plasticised, nitrated or chlorinated sleeves)
- X-ray plates must not be cut to separate objects. Sites should be X-rayed on different plates (see section 17.14.1)

APPENDIX A

HERITAGE SERVICE COLLECTING BOUNDARY

The Heritage Service's collecting boundary is the post-1974 county of Lincolnshire.



**APPENDIX B
DEPOSITION OF ARCHAEOLOGICAL ARCHIVE REQUEST FORM**

CONTRACTOR DETAILS

Contractor name:
Contractor address:
Contractor telephone: Contractor fax:
Contractor email:
Site name:
Site address / location:
Grid reference (at least 6 figure):
Planning Reference:
Nature of work:
Deposition window (mark month and specify year): Feb Apr Jun Aug Oct Dec Year:
Contractor suggested site code:
Museum confirmed site code: (for museum use only)
Museum Accession Number: (for museum use only)

Send form to archdeposition@lincolnshire.gov.uk

APPENDIX C ARCHIVE BOX SIZES AND SUPPLIERS

Documentary archive boxes

Boxes containing documentary archives should be low-acid, brass stapled with full or half depth lids. The acceptable dimensions are:

- 254mm x 356mm x up to 115mm (suitable for A4)
- 355mm x 470mm x up to 115mm (suitable for A3)
- 360mm x 920mm x up to 115mm (suitable for rolled documents up to A0)

Bulk finds boxes

Boxes containing bulk finds should be low-acid, wire stitched with full or half depth lids. The acceptable dimensions are:

- 305mm x 305mm x 203mm ('full size' bulk box)
- 305mm x 305mm x 102mm ('half sized' bulk box)
- 610mm x 305mm x 203mm ('skeleton box')
- 216mm x 216mm x 210mm ('skull box')

Registered finds boxes

Registered finds boxes should be of a suitable size to safely contain the material inside. **No individual outer box should be smaller than 130mm x 130mm x 50mm.** Any registered finds box (including custom boxes) over 610mm x 305mm x 203mm should be discussed with the Heritage Service prior to deposition to ensure that storage arrangements can be made.

Suppliers

A selection of external suppliers for packaging and object marking are suggested below, but other suppliers are available. Lincolnshire County Council has no affiliation with any of the suppliers listed and takes no responsibility for the products they supply.

Low acid boxes for documentary and bulk find storage can be purchased from:

G. Ryder and Co. Ltd.
Denbigh Road
Bletchley
Milton Keynes
MK1 1DG
Tel: 01908 375524
Web: hwww.ryderbox.co.uk

Airtight polythene boxes for the storage of registered finds and sensitive bulk finds can be purchased from:

The Stewart Company
Stewart House
Waddon Marsh Way
Purley Way

Croyden
Surrey
CR9 4HS
Tel: 020 8603 5700
Web: www.stewartcompany.co.uk/

Materials for object marking and general conservation grade materials can be obtained from:

Preservation Equipment Ltd
Vinces Road
Diss
Norfolk
IP22 4HQ
Tel: 01379 647400
Web: www.preservationequipment.com

Conservation Resources UK Ltd
Unit 2 Ashville Way
Off Watlington Road
Cowley
Oxfordshire
OX4 6TU
Tel: 01865 747755
Web: www.conservation-resources.co.uk

Conservation by Design
2 Wolseley Road
Kempston
Bedford
MK42 7AD
Tel: 01234 846300
Web: www.conservation-by-design.com

**APPENDIX D
TRANSFER OF TITLE FORM**

To The Lincolnshire County Council Heritage Service

Re (site):

.....

.....

I am the legal owner of the finds from the above named archaeological site. I hereby agree to donate the artefacts from the site to the Heritage Service as representatives of Lincolnshire County Council. This donation is an absolute gift without condition. I relinquish all legal claims for the ownership of the artefacts in favour of Lincolnshire County Council.

Signed

Print

Position.....

Organisation.....

Date.....

PART 3

MONITORING AND CONTINGENCY

18. MONITORING (v2.1)

18.1 Introduction

To ensure that any controlled archaeological work, such as that required by the planning process, is being carried out in accordance with the agreed project design, monitoring of fieldwork and post-fieldwork analysis will be required. Controlled work includes work by statutory undertakers, through agri-environment schemes, work done under ecclesiastical exemption or by the Ministry of Defence as well as work that has come through the planning process. In the following paragraphs the reference is to the planning process but it applies to all controlled archaeological work.

18.2 Background

Increasingly it is becoming necessary for all stages of the archaeological project to be monitored as it takes place. The aim is to ensure that the work is being carried out in accordance with the specification and in a way that will satisfy the requirements of the planning authority. It will also prove mutually beneficial for there to be an ongoing dialogue between the planning archaeologist and the contractors in the field. The final monitoring points will be to ensure that an appropriate report and archive have been deposited. Until this has been achieved, the developer will not be considered to have fulfilled the requirements of the planning permission.

18.3 General principles

Monitoring should be arranged to satisfy the CifA standards (CifA, 2015 a-e Monitoring section in each of these standards and guidance papers). The archaeological monitors, usually the planning archaeologists, are not liable in any way for the failings of the contractor and such monitoring is not intended to take the place of proper self-regulation. The importance of self-regulation cannot be overstated. It is the contractor's responsibility to his client to ensure the planning requirements imposed upon the developer are met, in accordance with the brief and specification.

18.4 Monitoring in practice

18.4.1 The aims of the monitoring should be to ensure that:

- a) all critical aspects of the programme of archaeological works are undertaken to the satisfaction of the local planning authority;

- b) all aspects of the work are undertaken in accordance with the agreed specification;
- c) variations to the specification shall be agreed with the planning archaeologist in writing prior to them being carried out.

18.4.2 It will be necessary to make arrangements for the monitoring prior to work commencing. In order for the planning archaeologist to timetable monitoring into each archaeological project they will require at least ten working days' notice prior to the commencement of the work. In the discussions between planning archaeologist and contractor the following points will be relevant:

- a) nominating representatives of the planning authority to carry out the monitoring;
- b) arranging access to the site for specialists appointed both by the planning authority and the contractor;
- c) establishing smooth lines of communication between the planning archaeologist, the contractor, consultant and developer, as appropriate;
- d) creating a project timetable with monitoring visits accounted for.

18.5 Aspects to be monitored

Some points are of particular relevance when monitoring an archaeological project and these are outlined here.

18.5.1 The monitor will wish to confirm that excavation trenches and other interventions are located according to the agreed project design.

18.5.2 The monitor will need to be satisfied that the first archaeologically significant horizon has been correctly identified and no information has been lost by inappropriate use of a mechanical excavator.

18.5.3 The monitor will wish to assure him/herself that the project design is being followed in an appropriate way.

18.5.4 As the planning archaeologist with responsibility for advising on preservation *in-situ*, the monitor must be involved in any matters relating to on-site decisions regarding the conservation of remains.

18.5.5 At the end of the fieldwork phase the monitor will wish to be assured that:

- a) the project design has been adhered to or altered only with his/her agreement;
- b) satisfactory arrangements have been made for any remains to be preserved *in-situ*;
- c) arrangements are in hand for backfilling the trenches and for returning the site to a condition acceptable to the planning authority and the developer.

18.5.6 During the carrying out of a given project the monitor may make an unannounced site visit. By doing this he/she will aim to ensure that:

- a) work is proceeding in accordance with the agreed project design;
- b) the production of the necessary site archive is taking place in a satisfactory manner.

18.5.8 The monitor's task will not be complete until a copy of an appropriate report has been approved and deposited with the HER and an acceptable archive has been deposited in the appropriate archiving facility.

18.6 Reporting

There will be three aspects to reporting the monitoring of fieldwork.

18.6.1 The monitor will make a verbal report on-site during his/her visit and amendments to the agreed project design may be made (subject to the developer's approval).

18.6.2 The monitor may produce a written report, based upon the checklist in Appendix 6 below, which will be circulated to all relevant parties.

18.6.3 Sometimes a planning condition may be breached in a way that requires enforcement action. In such cases the monitor will notify the local planning authority pending enforcement action.

19. CONTINGENCIES (v2.1)

19.1 Introduction

This chapter outlines the responsibilities and the procedures to be followed in the event of unexpected discoveries being made during an historic environment project.

19.2 Background

Many of the procedures outlined in this document rely on the decisions made on currently available evidence. This evidence may be incomplete. Contingencies will be necessary to deal with unexpected discoveries, as it will not always be possible to absorb the extra work needed within the originally allocated resources.

19.3 The responsibility of the archaeological contractor

In all cases it is the responsibility of the archaeological contractor to inform all interested parties of any new or unexpected circumstances which arise during the project, whether or not the site is being monitored regularly. No decisions should be made as to an appropriate alteration to the project without the agreement of the planning archaeologist and the developer. This is particularly important when there are archaeological and/or financial implications.

19.4 Contingency

Both the planning archaeologist and the contractor should endeavour to identify any likely circumstances that might arise during the project that will result in costs over and above the expected cost of the project (see 9.4.13). These contingency costs should be quantified on the brief and/or the specification. It will be the responsibility of the planning archaeologist, on behalf of the local planning authority, to decide whether conditions on site allow for the use of a particular contingency but a contingency should only be implemented with the agreement of all interested parties. Final instructions should be made in writing to the developer on behalf of the local authority.

19.5 Discovery of remains during development

19.5.1 If, during the course of development, archaeological remains come to light for which no contingency has been made and which are not of national importance (see 18.5.3 below), then the planning archaeologist may wish to open discussions with the

developer, on behalf of the local planning authority, to provide for the preservation or recording of those remains. The developer will not normally be under an obligation to provide further resources but will be expected to comply with all reasonable requests to ensure the recording or preservation of the remains.

19.5.2 An exception to 19.5.1 above will be where human remains are uncovered. In this case the developer will be responsible under the Burial Act (1857) for the excavation and removal of those remains.

19.5.3 Where remains are deemed by the Secretary of State, on the advice of Historic England, to be of national importance, in accordance with his published criteria (see Appendix 2), then the Secretary of State has the power to legally protect the remains through the process of scheduling. In that event the developer would need to seek separate scheduled monument consent before continuing work. It is also open to the local planning authority (or the Secretary of State) to revoke planning permission if necessary. In this case the developer may be liable for compensation. In the majority of cases, however, it should prove possible for the parties to resolve their differences through voluntary discussion and for a satisfactory compromise to be reached.

PART 4

APPENDICES (v4.0)

BIBLIOGRAPHY

ALGAO 1997 *Association of Local Government Officers - Analysis and Recording for the Conservation and Control of works to Historic Buildings - Advice to local authorities and applicants*

Armin Schmidt *et al.* *Archaeological Data Service Geophysical Data in Archaeology: A Guide to Good Practice* ADHS Guides to Good Practice

Arup (Ove Arup & Partners and the Dept of Archaeology, Univ of York in association with B Thorpe) 1991 *York development and archaeology* Manchester: Ove Arup

CLAU 1993 *Finds thesaurus* Lincoln: City of Lincoln Archaeology Unit

EAC Guidelines for the Use of Geophysics in Archaeology: EAC Guidelines 2

English Heritage 1991a *Management of archaeological projects* London: HBMC

English Heritage 2004 *Human Bones from Centre for Archaeology Guidelines Archaeological Sites Guidelines for producing assessment documents and analytical reports*

English Heritage 2005 *Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England*

English Heritage 2016a *Geophysical Survey in Archaeological Field Evaluation*

English Heritage 2008b *Investigative Conservation: Guidelines on how the detailed examination of artefacts from archaeological sites can shed light on their manufacture and use*

English Heritage 2008c *Conservation Principles policies and guidance for the sustainable management of the historic environment*

English Heritage 2008d *Mineral Extraction and Archaeology: A Practice Guide*

English Heritage 2010 *Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood*

English Heritage 2011 *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation* (second edition)

English Heritage 2012 *Waterlogged organic Artefacts: Guidelines on their recovery, Analysis and Conservation*

English Heritage 2013 *Science and the Dead: Guidelines for the destructive sampling of archaeological human remains for scientific analysis*

Gaffney, C and Gater, J 2003 *Revealing the Buried Past Geophysics for Archaeologists*: Tempus Publishing

Historic England 2015 *Archaeometallurgy: Guidelines for Best Practice*

Historic England 2016 *Understanding Historic Buildings: A guide to good recording practice*

CifA 2015a *Standard and guidance for Historic Environment desk-based assessments*

CifA 2015b *Standard and guidance for archaeological field evaluations*

CifA 2015c *Standard and guidance for an archaeological watching brief*

CifA 2015d *Standard and guidance for archaeological excavations*

CifA 2015e *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*

Morris, R 2000, *The Archaeology of Buildings*

RCHME 1996a *Recording historic buildings: a descriptive specification* London: RCHME

SMA 1992 *Guidelines on the selection, retention and display of archaeological collections*

SMA 1995 *Transfer of archaeological archives to museums: guidelines for use in England, Northern Ireland, Scotland and Wales* (Second draft of SMA guidelines)

Spence, C. (ed.) 1994 *Archaeological site manual* London: Museum of London

The Treasure Act 1996 - *Code of Practice* - Department of National Heritage (England and Wales)

Walsh, D 1969 *Report of the Committee of Enquiry into the Arrangements for the Protection of Field Monuments 1966-8* London: HMSO

Watkinson, D and Neal, V 1998 *First Aid for Finds* RESCUE/UKIC

Wood, J (ed) 1994 *Buildings archaeology: Applications in practice* Oxford: Oxbow

APPENDIX 1 Legislation relevant to archaeological heritage management

Burial Act 1857
Forestry Act 1967
Countryside Act 1968
Protection of Wrecks Act 1973
Ancient Monuments and Archaeological Areas Act 1979
Wildlife and Countryside Act 1981, amended 1985 and 1991
National Heritage Act 1983
Inheritance Tax Act 1984
Disused Burial Grounds (Amendment) Act 1981
Wildlife and Countryside (Amendment) Act 1985 and 1991
Agriculture Act 1986
Protection of Military Remains Act 1986
Water Industry Act 1991
Electricity Act 1989
Environmental Protection Act 1990
Town and Country Planning Act 1990
Planning (Hazardous Substances) Act 1990
Planning (Consequential Provisions) Act 1990
Planning (Listed Buildings and Conservation Areas) Act 1990
Planning and Compensation Act 1991
Water Industry Act 1991
Water Resources Act 1991
Land Drainage Act 1994
Environment Act 1995
Treasure Act 1996 and Code of Practice 1997

Please note this is not an exhaustive list of legislation although every endeavour has been made to ensure its accuracy. For further details all current and superseded legislation see the OPSI (Office of Public Sector Information) website. www.statutelaw.gov.uk

APPENDIX 2 Secretary of State for Culture, Media and Sport's criteria for the scheduling ancient monuments

The criteria below are used for assessing the importance of a given monument but are not definitive and have no statutory basis. Rather the criteria are indicative and professional judgement will always contribute to the assessment of a particular case.

i. Period

all types of monuments that characterise a category or period should be considered for preservation.

ii. Rarity

there are some monument categories which in certain periods are so scarce that all surviving examples which still retain some archaeological, potential should be preserved. In general, however, a selection must be made which portrays the typical and commonplace as well as the rare. This process should take account of all aspects of the distribution of a particular class of monument, both in a national and a regional context.

iii. Documentation

the significance of a monument may be enhanced by the existence of records of previous investigation or, in the case of more recent monuments, by the supporting evidence of contemporary written records.

iv. Group value

the value of a single monument (such as a field system) may be greatly enhanced by its association with related contemporary monuments (such as a settlement and a cemetery) or with monuments of different periods. In some cases, it is preferable to protect the complete group of monuments, including associated and adjacent land, rather than to protect isolated monuments within the group.

v. Survival/condition

the survival of a monument's archaeological potential both above and below ground is a particularly important consideration and should be assessed in relation to its present condition and surviving features.

vi. **Fragility/vulnerability**

highly important archaeological evidence from some field monuments can be destroyed by a single ploughing or unsympathetic treatment; vulnerable monuments of this nature would particularly benefit from the statutory protection which scheduling confers. There are also existing standing structures of particular form or complexity whose value can again be severely reduced by neglect or careless treatment and which are similarly well suited by scheduled monument protection, even if these structures are already listed historic buildings.

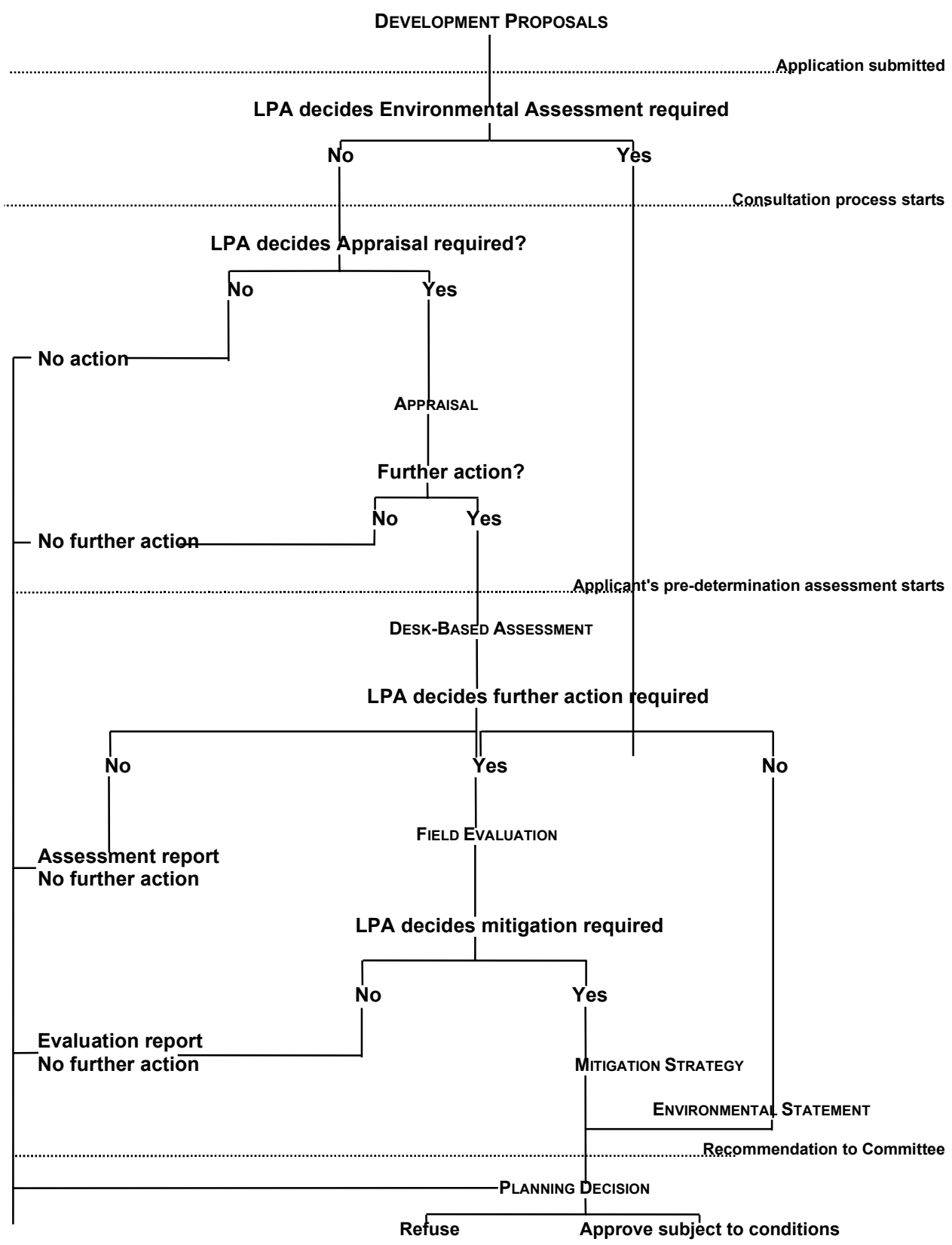
vii. **Diversity**

some monuments may be selected for scheduling because they possess a combination of high quality features, others because of a single important attribute.

viii. **Potential**

on occasion, the nature of the evidence cannot be specified precisely but it may still be possible to document reasons anticipating its existence and importance and so to demonstrate the justification for scheduling. This is usually confined to sites rather than upstanding monuments.

APPENDIX 3 Model for archaeological project



(see section 4.10)

APPENDIX 4 Sources for a Desk-based Assessment

The list below is not exhaustive but is indicative of the sources that should be considered for reference by those undertaking a desk-based assessment.

- a) Lincolnshire Historic Environment Record, Lincolnshire Archives and other local databases such as those of district archaeologists and the Lincoln Urban Archaeological Database;
- b) national databases including the National Monuments Record, the schedule of monuments, the register of historic parks and gardens, the register of battlefields and the listed building lists;
- c) the portable antiquities database
- d) public and private collections of artefacts and ecofacts;
- e) all Ordnance Survey maps;
- f) Tithe, Enclosure Award and Parish maps and other cartographic and pictorial sources;
- g) historic documents (for example, charters, registers, wills, deeds, etc) particularly those held in Lincolnshire Archives Office;
- h) archaeological books and journals;
- i) unpublished reports and archives (for example, local society archives, university dissertations, etc);
- j) aerial photographs, particularly those held by the Lincolnshire Historic Environment Record, the National Library of Air Photographs, Swindon and the Unit for Landscape modelling, Cambridge;
- k) survey of available borehole data and other geophysical and/or geotechnical information;
- l) local policy statements and research frameworks;
- m) historic landscape characterisation;
- n) web-based sources, such as the National Archives website www.nationalarchives.gov.uk, The British and Irish archaeological bibliography, www.biab.ac.uk or the Archaeology Data Service, www.ahds.ac.uk;
- o) any other sources deemed appropriate;
- p) a visit to verify site conditions and meet local people.

APPENDIX 5

Authority to excavate human remains for archaeological purposes



Please read the Guidance Notes at the end of this form.

The purpose of this form is to provide the Ministry of Justice with information to enable a decision to be taken on the issue of an excavation licence and any conditions to be attached to it regarding the treatment of the remains during and after excavation.

Section A is to establish who the applicant is and how to make contact.

Section B is to clarify the nature of the archaeological site, the legislation which applies to it, the purpose of the excavation, and who is to take responsibility for post-excavation and archive deposition and/or reburial. Section C seeks information regarding the expected age, nature and number of the human remains. Section D seeks information about any known or likely objections to the proposed excavation and study. Section E asks what is to happen to the human remains after excavation.

A. Applicant's details

1. Name
2. Telephone number
3. Organisation (if applicable)
4. Position (if applicable)
5. Address
6. Email address
7. Do you observe a recognised code of practice on the treatment of human remains? Yes No
If Yes, which one?
If No, please give the title of your own code if you have one

B. Site details

8. Name of site (if it has one)
9. Address or location of site
10a. Please give a brief summary of the site archaeology and research questions

10b. Is the excavation necessitated by development?
Yes
No

11. Name and address of the land owner

Is the site owned by a religious organisation?
Yes
No

If Yes, which one?

12. Has the land owner given permission for the remains to be excavated?
Yes No

If No, explain why not

13. Has the proposed excavation been developed in response to a brief or agreed
Yes
No
written scheme of investigation from the appropriate curatorial archaeologist?

14. Is the site subject to Church of England faculty jurisdiction or the Care of
Yes
No
Cathedrals Measure?
If Yes, has approval been given?
Yes
No

15. Is the site a burial ground in current use?
Yes
No
If No, has the site been put to other use?
Yes
No

16. If the site has been put to other use, has the site been built over (including roads)?
Yes
No

17. If the site has been put to other use, has the site been put to agricultural use
Yes
No
or become open land?

18. Has the site been acquired commercially/by agreement? Yes
No N/A

19. Has the site been acquired by Compulsory Purchase Order? Yes
No N/A

20. Has Planning Permission been obtained? Yes
No N/A

21. Is the site a scheduled monument?
- Yes
- No
- If **Yes**, has scheduled monument consent been obtained for the excavation?
- Yes
- No

22. Is the excavation of human remains from the site subject to any specific
- Yes
- No
- Act of Parliament?

If **Yes**, which Act?

23. If the proposed excavation is not being carried out under planning conditions or scheduled monument consent, please give **brief** details of the planned programme of excavations, the relevant experience and qualification of the applicants the source(s) of funding and whether resources are in place to cover post-evaluation assessment, analysis, dissemination and archive deposition/reburial.

24. Do you/your organisation accept responsibility for ensuring that post-excavation
- Yes
- No
- study and archive deposition/reburial are completed?

If **No**, explain why not

25. Expected project start date

End date

26. Dates for excavation of human remains (if different from above):

Start date

End date

C. Human remains

27. Expected date range of the remains:

From

To

28. Expected number of buried individuals (or, if unknown, estimated range)

29. Expected type of remains Skeletal Soft tissue Cremated
 Not known

30. If some or all of the human remains are likely to be in sealed coffins or in a crypt, or to include preserved soft tissue, or to be less than 100 years old, please provide the contact details for the Environmental Health Officer (EHO) for the district.

31. Has the EHO already been notified that excavation will take place at the site?
Yes
No

32. Are the remains known to be of a particular religion or faith?
Yes
No

If **Yes**, which religion/faith?

If **Yes**, are representatives of that religion/faith aware of the excavations?
Yes
No

D. Objections

33. Are there any known or likely objections to the removal, study and/or retention
Yes
No
of the remains?

If **Yes**, state who is objecting or likely to object and their reasons

E. What would happen to the remains?

34. Is it the intention to excavate and remove some or all of the human remains?
Yes
No

If **Yes**, please proceed to question E35–40

Is it the intention to uncover the remains, leave them *in situ* and rebury them?
Yes
No

If **Yes**, you do not need to complete questions E35–40.

35. If the human remains are to be examined, please outline the reasons:

36. If remains less than 100 years old are expected to be found, and will be examined, please outline how you intend to comply with the conditions of the Human Tissue Act 2004.

37. After excavation, what do you expect will happen to the remains?

- a. Assessed and studied as necessary, and then reburied
- b. Studied and then deposited in a museum or similar institution known
- c. Not yet

38. If for question 37 you selected a:

i. Please provide the name and address of the location where the remains are to be reburied.

ii. Who will be responsible for taking care of the remains until reburial occurs?

iii. When will the remains be reburied?

Is appropriate funding in place?

Yes

No

39. If for question 37 you selected b:

i. When and where will the remains be examined?

ii. Who will make the decision about the retention of the remains?

iii. When will the decision be made?

iv. Has a museum or comparable institution agreed to take the remains?

Yes

No

v. What is the museum or comparable institution's name and address?

vi. Is it an accredited museum?
Yes
No

vii. Who will be responsible for taking care of the remains until this happens?

viii. Is appropriate funding in place?
Yes
No

40. If for question 37 you selected c:

i. When is a decision likely to be known?

ii. Who will make this decision?

iii. Who will be responsible for taking care of the remains until this happens?

Declaration

I confirm that the information given is true and correct to the best of my knowledge.

Name

Date

When completed, please email this form to: coroners@justice.gsi.gov.uk



Applications will be considered on their individual merits, balancing, amongst other things, the case for the removal, examination and retention of the remains in the interests of archaeological research against any countervailing factors, such as any public known concerns about the proposals or any risk to public confidence in the decent and respectful treatment of human remains in any particular instance.

An application for a licence should be made whether buried human remains are to be removed from the ground or intended to be left *in situ* (since excavation is likely to disturb them).

The following notes are intended to help applicants in completion of the form. Please ring 020 3334 3555 for any further assistance.

Q A5	Please give address of organisation unless applying as an individual, in which case give applicant's address.
Q A7	If you observe no code of practice, it is suggested that you adopt one.
Q B9	If there is no satisfactory address which will identify the site, please give the National Grid Reference or attach a plan of the site.
Q B10	Please explain why the excavation is required (e.g. because the site is to be developed, or for research purposes).
Q B11	The purpose of the supplementary questions about religious ownership is to enable any religious concerns there may be to be taken into account.
Q B12	It is expected that the site owner has given permission for excavation; if this is not the case, an explanation should be given.
Q B14	If the site is a Church of England burial ground and subject to ecclesiastical faculty jurisdiction, a faculty will be required in addition to a licence. However, a licence will not be needed if the remains are to be reburied within consecrated ground. If the site is within a cathedral precinct and subject to the Care of Cathedrals Measure, then formal approval for the works will also be required from either the Cathedrals Fabric Commission for England or, on occasion, the cathedral's own Fabric Advisory Committee. A copy of correspondence confirming this approval has been granted should be provided.
Q B15-19	The intention is to identify the specific legislation which governs the removal or disturbance of human remains buried on the site (e.g. the Burial Act 1857, the Disused Burial Grounds (Amendment) Act 1981, or the Town & Country (Churches, Places of Religious Worship, and Burial Grounds) Regulations 1950 and 1990).
Q B22	Large infrastructure projects are often subjected to a specific Act; if this is the case, the name of the Act should be given.
Q B23	This information is not required for sites excavated under scheduled monument consent or as a condition of planning consent, as the relevant regimes require good reason for excavation and appropriate planning and provision, and so these can be assumed to be in place already.
Q B24	In some emergency situations, funding for post-excavation and archive deposition may not be in place. If so, the circumstances should be explained.
Q C27 and C28	These may be unknown at the time of excavation; it would be helpful to provide any available information or estimate, and it is accepted that what is found may be unexpected. Disarticulated remains should not be included in the estimate of the number of buried individuals. For example: "100–150 burials and some disarticulated human remains".
Q C29	Please tick all that apply.
Q C30 and C31	It would normally be expected that an excavator should contact the EHO if soft tissue survival is likely, or if human remains less than 100 years old or sealed coffins or crypts are likely to be excavated.

Q C32	When remains are of known religion or faith, it may be appropriate to contact representatives of that religion, but this is not required. It is accepted that religion or faith are usually uncertain for pre-Mediaeval human remains.
Q D33	Applicants are not expected to research the existence of objections, simply to report if any such objections have come to their attention. Objections will be considered and balanced against the need for and benefits of excavation and study.
Q E34	If you tick Yes to the intention to uncover the remains, leave them <i>in situ</i> and rebury them, you do not need to complete questions E35–40. If, however, circumstances then change and it becomes necessary to remove any of the remains, you would need to apply to vary your licence, and would then need to answer these questions.
Q E36	If this applies, additional information may be required before consideration will be given to issuing a licence.
Q E37a	Please tick this option if it is expected that some or all of the remains will be assessed, studied as necessary as part of the site's post-excavation analysis, and buried once this is completed. Please complete all questions at E38.
Q E37b	Please tick this option if, after study as part of the site's post-excavation analysis, the intention is to retain some or all of the remains in a museum or comparable institution so that they are available for further study. Please complete all questions at E39.
Q E37c	Please tick this option if, at the time of application, no decision has been taken on what will happen to the remains, or if no decision can be taken until the remains have been examined. Please complete all questions at E40.
Q E38 (ii), E39(vii) and E40(iii)	If the application is made on behalf of an organisation, it will be assumed that if the individual who is named leaves the organisation, the responsibility remains with the organisation. A licence condition is likely to be attached requiring the remains to be under the control of a competent member of staff or the holder of the stated position. Please indicate if such a licence condition would be inappropriate.
Q E39(ii) and E39(iii)	These questions are to clarify when a decision on the future of the remains is likely to be taken and who will be involved in the decision-taking process (for example, the local authority archaeologist and local museum). Where these arrangements are clear, a licence may be issued to allow retention/curation of the remains subject to compliance with the specified timescale and process.
Q E39(iv), E39(v) and E39(vi)	The purpose of these questions is to ensure that deposited human remains will be treated appropriately. If the place of deposition is not an accredited museum, please provide information to show that it can and will provide appropriate care.
Q E40	Where the decision about the remains is unknown, it may be necessary to issue a licence with a re-burial condition only pending an alternative decision. An application to vary the licence would then need to be made at a later date.

Appendix 6 Site monitoring report form

SITE DETAILS

Site:

Monitor:

Date/time of visit:

Weather conditions:

Contractor:

Archaeological project manager:

Background/reason for visit:

Persons in attendance:

Work programmed:

Work in progress:

Work completed:

ASPECTS MONITORED

Methodology

Trench location/machine excavation

Stratigraphic excavation

Assessment of natural deposits

Protection of remains of importance

Treatment of human remains

Recording of standing structures

Geophysical survey

Access and safety

Suitable access for monitoring

Health and safety

Deep excavations shored

Recording system

Site code/museum no. in use

Records accord with

Site tied to OS grid

TBM established

Harris-type matrix being compiled

Photographic record in production

Records being verified

Finds and samples

Environmental sampling as agreed (or variation)

Finds retrieval as agreed (or variation)

Ceramic dating and analysis in progress (or variation)

Finds stabilisation in progress (or variation)

Countersigned by

Monitor

Contractor

Date

Date

APPENDIX 7 (Version 3) List of useful addresses

National bodies

Council for British Archaeology
Beatrice de Cardi House
66 Bootham
YORK
YO30 7BZ
Email: webenquiry@archaeologyuk.org

Department of Culture, Media and Sport
100 Parliament Street
LONDON
SW1A 2BQ
Email: enquiries@culture.gov.uk

Historic England (General Enquires)
Customer Services Department
The Engine House
Fire Fly Avenue

SWINDON
SN2 2EH
Email: customers@HistoricEngland.org.uk

Historic England (Midlands regional office)
The Axis
10 Holiday Street
Birmingham
B1 1TF
Email: midlands@HistoricEngland.org.uk

Chartered Institute for Archaeologists
Miller Building
University of Reading
READING
RG6 6AB
Email: admin@archaeologists.net

Historic England Archive (formally the National Monuments Record)
The Engine House
Fire Fly Avenue

SWINDON
SN2 2EH
Email: archive@HistoricEngland.org.uk

IHBC

Jubilee House
High Street
Tisbury
Wiltshire
SP3 6HA
Email:admin@ihbc.org.uk

Association of Local Government Archaeological Officers:

Enquiries by Email: AlgaoAdminCambs@Cambridshire.gov.uk

Local authority

Lincolnshire County Council
Historic Places Team
Lancaster House
36 Orchard Street
Lincoln
LN1 1XX
Email: lincssmr@lincolnshire.gov.uk

Lincolnshire County Council
The Collection
Danes Terrace
Lincoln
LN2 1LP
Email: thecollection@lincolnshire.gov.uk

District Archaeologists:

East Lindsey/West Lindsey/South Holland care of:

Lincolnshire County Council
Historic Places Team
Lancaster House
36 Orchard Street
Lincoln
LN1 1XX
Email:lincssmr@lincolnshire.gov.uk

South Kesteven/North Kesteven/Boston care of:

Heritage Lincolnshire

The Old School
Cameron Street
Heckington
SLEAFORD
NG34 9RW
htladmin@heritagelincolnshire.org

City of Lincoln care of:

Archaeological Officer
Lincoln City Council
City Hall
Beaumont Fee
LINCOLN
LN1 1DF

Portable Antiquities Scheme
Lincolnshire Finds Liaison Officer
Lincolnshire County Council
Historic Places Team
Lancaster House
36 Orchard Street
Lincoln
LN1 1XX
Email: lincssmr@lincolnshire.gov.uk

Lincolnshire Archaeological Contractors

The CifA will provide lists of registered archaeological organisations.

APPENDIX 8 Selected Glossary of terms

Association of Local Government Archaeological Officers (ALGAO)

ALGAO-UK provides a forum which represents archaeologists working for local authorities and national parks. Its membership consists of senior professional archaeologists employed by local authorities to provide advice on archaeological conservation and management.

Appraisal

A rapid reconnaissance of site and records to identify (within the planning framework) whether a development proposal has a potential archaeological dimension requiring further clarification. This can be separated into 'simple appraisal' based on development type and local knowledge and 'detailed appraisal' involving a check against known information.

Archaeology

The study of the development of the human species and its environment through their material remains.

Archaeological Interest

An interest in carrying out an expert investigation at some point in the future into the evidence a heritage asset may hold of past human activity. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them. These heritage assets are part of a record of the past that begins with traces of early humans and continues to be created and destroyed.

Artefact

An object or part of an object which has been used or altered in some way by human interference and forms part of the cultural or economic remains of human development.

Brief

An outline framework of the archaeological situation which has to be addressed together with an indication of the scope of works that will be required (IfA, 1993)

Client

The individual or organisation commissioning and funding the project

Conservation

The process of maintaining and managing change to a heritage asset in a way that sustains and where appropriate, enhances its significance.

Consultant archaeologist

An expert who will give 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**.

Contractor

A person or organisation commissioned to undertake archaeological research and fieldwork usually to a brief set by a **planning archaeologist** or consultant archaeologist.

County archaeologist

Senior archaeologist employed by County Council to manage its Historic Environment service with a remit countywide to manage, protect and enhance the County's heritage. This provides for stewardship of the historic environment and management of its records.

Curatorial archaeologist

An archaeologist with direct responsibility for the management of the archaeological resource. The work of such organisations and individuals is largely one of cultural resource management. Such people as the County Archaeologist, planning archaeologists, Historic Environment Record staff and Historic England staff would be included in this category, (See also **planning archaeologist**).

Desk-based assessment (Desk-top study)

Desk-based assessment is a programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage assets and, in England, the

nature, extent and quality of the known or potential archaeological, historic, architectural and artistic interest. Significance is to be judged in a local, regional, national or international context as appropriate. (CifA 2014a)

Ecofact

The physical material which forms the evidence for the study of the interaction between the environmental setting of the locality of archaeological interest and the human exploitation taking place in the locality (see **Environmental Archaeology**).

Environmental archaeology

Environmental archaeology is the study of past human economy and environment using earth and life sciences. It tells us about ecological, cultural, economic and climate changes. This is achieved through the study of soils and sediments, macroscopic and microscopic plant and animal remains.

Excavation

A programme of controlled, intrusive fieldwork with defined research objectives which examines and records 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 objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the **project design** and in the light of findings.

Historic Environment

The term that encompasses all historic and archaeological material, from the archaeological remains still buried in the ground to the landscape they sit in. From the largest cathedral, church or housing estate to a barrow, medieval ditch or flint tool.

Heritage Asset

A building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. Heritage assets are the value components of the historic environment. They include designated heritage assets and assets identified by the local planning authority during the process of decision making or through the plan making process.

Institute of Historic Building Conservation (IHBC)

The IHBC is the principle body in the United Kingdom representing professionals and specialists involved in historic environment conservation.

Field 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 or site on land or underwater. If such archaeological remains are present Field Evaluation defines their character and extent, and relative quality; and it enables assessment of their worth in a local, regional, national or international context as appropriate (CifA 2014b)).

Heritage Impact Assessment

A study to evaluate the impact of a specific proposal on the significance of a place (including above and below ground historic assets) and identifying ways of mitigating any adverse impacts.

Historic Environment Record (HER)

A database (including paper as well as digital records) of all the known archaeological sites, historic buildings and findspots from a given area, usually a county, maintained by the County Council, and adopted by final resolution. Formerly known as a Sites and Monuments Record.

Chartered Institute for Archaeologists (CifA)

The Chartered Institute for Archaeologists is a professional organisation for all archaeologists and others involved in protecting and understanding the historic environment.

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 Historic England.

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 .

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, see Appendix 6 of MAP2 for further detail.

Setting

The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral

Site archive

This will contain all the data gathered during fieldwork and must be quantified, ordered, indexed and internally consistent. It represents the original record of the project's results,

Sites and Monuments Record (SMR)

See Historic Environment Record (HER)

Statement of Significance

A 'statement of significance' is a summary of heritage and cultural values attached to a building which distil the particular character of the place. It should explain the relative importance of heritage values, putting these values in a national, regional and local context, how these relate to physical historic fabric, the extent of uncertainty regarding hidden/buried elements and should identify tensions between conflicting values.

The result should guide decisions about material change to a significant place and impacts on its character. Often these might be written as stand-alone documents to

advise local authority or government agency professionals, or may be produced in conjunction with a Heritage Impact Assessment which establishes the impact of specific proposals on the special interest of an historic building and its landscape, identifying ways of mitigating such impacts. These should always involve liaison with appropriate Conservation professionals' dependant on the context requirement for such Statements.

Specification

A written schedule of works required for a particular project (by a curatorial archaeologist, 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.

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, inter-tidal zone 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 (ClfA, 2014c). This term is not routinely used, 'a Programme of Archaeological Work' or a 'Scheme of Monitoring and Recording' is preferred as it allows more flexibility for better recording of archaeological finds and features.

APPENDIX 9 Abbreviations used in this manual

ALGAO	Association of Local Government Archaeological Officers
AEA	Association for Environmental Archaeology
DCMS	Department of Culture, Media & Sport
DOE	Department of the Environment
HE	English Heritage
HER	Historic Environment Record
HTL	Heritage Trust for Lincolnshire
CifA	Institute for Archaeologists
IHBC	Institute of Historic Building Conservation
LCC	Lincolnshire County Council
LCNCC	Lincoln City and County Museum (The Collection)
MAP2	Management of Archaeological Projects (English Heritage)
MDA	Museum Documentation Association
MGC	Museums and Galleries Commission
MoRPHE	Management of Research Projects in the Historic Environment
MOLAS	Museum of London Archaeological Service
NMR	National Monuments Record (RCHME)
NPPF	National Planning Policy Framework
NRA	National Rivers Authority
PPG	Planning practice guidance
PPS	Planning policy statement
SM	Scheduled Monument
SCAUM	Standing Conference of Archaeological Unit Managers
SMA	Society of Museum Archaeologists
SMR	Sites and Monuments Record
UKIC	United Kingdom Institute for Conservation

APPENDIX 10 Pottery Fabric Lists

	A	B	C	D	E	F	G
1	Fabric Code	Appendix	Ware Class	Fabric details	Earliest date	Latest date	Comment
2	ABIV	Amphora	Fabric	Biv Amphorae	200	[550]	Unlikely past 410 although production continues
3	AMPH	Amphora	Group	Miscellaneous Amphorae	-100	410	
4	ARGO	Import	Fabric	Argonne Ware	320	410	
5	BAE24	Amphora	Fabric	Baetican Dr 2-4	0	120	
6	BAE28	Amphora	Fabric	Baetican Dr 28	50	150	
7	BB1	Reduced	Fabric	Black Burnished Ware 1	[50]	[450]	Commences 120 In Lincolnshire
8	BB1G	Reduced	Group	Grey Sandy Black Burnished Ware 1	120	250	
9	BB2	Reduced	Group	Black Burnished Ware 2	120	250	
10	BB2T	Reduced	Group	Black Burnished 2 Type Ware	120	250	
11	BBT	Reduced	Group	Black Burnished 1 Type Copies	120	250	
12	BBTOX	Oxidised	Group	Oxidised Black Burnished Ware Copies	120	250	
13	BLEG	Import	Group	Black eggshell wares; N.Italian or Gallic	60	100	
14	BOUOX	Oxidised	Fabric	Oxidised Coarse (South Lincs)- OX	50	200	
15	BRCC	Fine	Fabric	Brough Yorks Colour-Coated	150	220	
16	BROX	Oxidised	Fabric	Brough Yorks Oxidised	120	230	
17	BUFF	Oxidised	Group	Micellaneous Buffwares	100	300	
18	BUFFG	Oxidised	Group	Buff Gritty Fabrics	100	300	c.f. Cameron 1989
19	BUFFIN	Oxidised	Group	Fine Buff Fabrics	100	300	Mostly Cambs Fenland types
20	C185	Amphora	Fabric	Camulodunum 185 Amphorae	-80	150	
21	C186	Amphora	Fabric	Camulodunum 186 Amphorae	-15	100	
22	C189	Amphora	Fabric	Camulodunum 189 Carrot Amphorae	0	120	
23	CALC	Calcareous	Group	Calcareous Tempered Fabrics	-1000	410	Miscellaneous calcareous tempers (not shell or calcite)
24	CALG	Calcareous	Group	Calcite tempered	50	410	
25	CALGS	Calcareous	Group	Sparry calcite gritted	50	410	
26	CASH	Calcareous	Group	Calcite/shell tempered wares	50	410	
27	CAT24	Amphora	Fabric	Catalan Dr 2-4	50	150	
28	CC	Fine	Group	Other colour-coated wares	50	410	
29	CGBL	Import	Fabric	Rhenish; from Central Gaul	150	250	
30	CGCC	Import	Fabric	Central Gaulish colour-coated; Lezoux etc.	50	130	
31	CGGW	Import	Fabric	Central Gaulish Glazed Wares	50	70	
32	CHALK	Amphora	Fabric	Chalk type Amphora	250	350	

	A	B	C	D	E	F	G
1	Fabric Code	Appendix	Ware Class	Fabric details	Earliest date	Latest date	Comment
33	CIMP	Oxidised and Reduced	Group	Unclassified Imported Continental Coarsewares	-25	410	
34	COA	Reduced	Group	Miscellaneous Coarse Wares	50	410	
35	COLC	Fine	Fabric	Colchester Colour-Coated	120	275	
36	COLC1	Oxidised	Fabric	Early Colchester Colour Coated Ware	120	200	
37	COLC2	Oxidised	Fabric	Late Colchester Colour Coated Ware	201	275	
38	CR	Oxidised	Group	Sandy Cream Wares (Various)	50	200	
39	CREL	Oxidised	Fabric	Lincoln Early Creamware	50	100	
40	CRFIN	Fine	Group	Fine Creamwares	50	410	e.g. NVCC1 type fabric
41	CRGR	Reduced	Fabric	Crambeck Grey Ware	300	410	
42	CRGRIT	Oxidised	Group	Cream Gritty Fabrics	100	300	Sandy Coarse Whiteware; as BUFFG but cream fabric; Cambs/fenny distribution; mostly 2-3C
43	CRL	Oxidised	Fabric	Lincoln Creamware	50	410	
44	CRMIC	Fine	Group	Fine Micaceous Creamware	50	300	
45	CRPA	Oxidised	Fabric	Crambeck Parchment Ware	370	410	
46	CRSA	Oxidised	Fabric	Lincoln Late Roman Sandy Ware	300	400	Usually creamish to light red brown in colour
47	CRSAO	Oxidised	Fabric	Cream Gritty White Ware - Possibly Oxford Product	50	410	Midlands distribution; probably Oxford Product; Fe, sand and Calc: can be also be quite fine
48	DERB	Reduced	Fabric	Derbyshire Ware	140	350	
49	DR20	Amphora	Fabric	Dr 20 amphorae	50	260	
50	DR20E	Amphora	Fabric	Dressel 20 Amphora (Early Fabric)	1	180	
51	DR20L	Amphora	Fabric	Dressel 20 Amphora (Late Fabric)	181	260	Usually salt slipped
52	DR28	Amphora	Fabric	Dr 28 amphorae	50	150	
53	DSGR	Reduced	Fabric	Early-Mid Roman Grog and Sand Ware	50	150	Navenby
54	DSSA	Reduced	Fabric	Early-Mid Roman Sandy Ware	50	230	Navenby
55	DWNEL	Calcareous	Fabric	Dalesware- North East Lincolnshire	230	350	
56	DWOOL	Calcareous	Fabric	Dalesware with Limestone Oolitic Grits	200	350	Possible East Yorkshire source
57	DWSH	Calcareous	Group	Dales Ware Shelly Fabrics	200	350	
58	DWSHS	Calcareous	Fabric	Dalesware-North West Lincolnshire	230	350	
59	DWSHT	Calcareous	Group	Dalesware Type	200	350	
60	EGGS	Import?	Group	Miscellaneous Eggshell Wares	55	100	
61	EIFL	Reduced	Fabric	Mayen ware; Eifelkeramik	300	410	
62	EMED	Amphora	Group	Undifferentiated East Mediterranean Amphorae	50	410	

	A	B	C	D	E	F	G
1	Fabric Code	Appendix	Ware Class	Fabric details	Earliest date	Latest date	Comment
63	EMED24	Amphora	Fabric	East Medit. Dr 2-4	50	120	
64	EPON	Import	Fabric	A l'eponge Ware	300	410	
65	ETW	Rock Temper	Group	Erratic Pebbles Broken up as Temper	-1000	1000	General code for undatable material; c.f. IAE TW for Iron Age/Tradition
66	ETWF	Rock Temper	Group	Erratic Pebbles Broken up as Temper-Fine	-1000	410	
67	ETWSH	Rock Temper	Group	Erratic Pebbles Broken up as Temper with Shell	-100	100	
68	F148	Amphora	Fabric	Tunisian(?) as Fishbourne 148.3	50	120	
69	FEGY	Reduced	Fabric	Iron Rich Early Roman Greyware	50	160	
70	FIMP	Fineware	Group	Unclassified Imported Continental Finewares	1	410	
71	FLIN	Flint	Group	Micellaneous Flint Tempered	-1000	410	IA or Roman
72	GAU	Amphora	Group	Undifferentiated Gaulish Amphorae	50	250	
73	GAU28	Amphora	Group	Gaulish Dr 28	50	150	
74	GAU4	Amphora	Group	Gauloise 4	50	250	
75	GAU6	Amphora	Group	Gauloise 6	50	250	
76	GBWW	Import	Group	Gallo-Belgic White Wares	40	70	
77	GFIN	Reduced	Group	Miscellaneous Fine Grey Wares	50	410	
78	GFINIMP	Reduced	Group	Miscellaneous Imported Continental Fine Grey Wares	50	410	
79	GLAZ	Import?	Group	Roman Glazed Wares of Uncertain Origin	50	410	
80	GMIC	Fineware	Fabric	Lincoln Fine Micaceous Ware	70	200	As London type FMIC
81	GMICG	Fineware	Group	Grey Fine Micaceous Wares	50	300	
82	GRBS	Reduced	Group	Grey with Black or Dark Grey Slip	120	300	Generally BB2 repertoire in Cambs, undoubtedly more than one production site
83	GRCF	Reduced	Fabric	North Cambridgeshire Grey with Flint	70	200	As March Longhill Rd; probably local product
84	GREY	Reduced	Group	Miscellaneous Grey Wares	50	410	
85	GREYB	Reduced	Fabric	High Fired Late Roman Greywares	250	410	NE Lincs Type- Similar to Swanpool Repertoire
86	GREYC	Reduced	Fabric	Coarse Grey Ware	50	410	
87	GREYCS	Reduced	Fabric	Grey with Sand Sized Calcareous Inclusions	50	150	Sleaford
88	GREYSH	Reduced	Group	Greyware with Sparse Shell	50	410	
89	GRFF	Reduced	Group	Fairly Fine Grey Wares	50	410	
90	GRL	Reduced	Group	Locally Produced Grey Ware Types	50	410	

	A	B	C	D	E	F	G
1	Fabric Code	Appendix	Ware Class	Fabric details	Earliest date	Latest date	Comment
91	GRLT	Reduced	Fabric	South Lincs Grey Light Fine	50	200	Similar to NVGY
92	GRNM	Reduced	Fabric	Norfolk East Anglian Micaceous Reduced	125	250	(Norfolk?); As Peachey GRS1 (East Winch); Andrews 1985 fabric RW5 at Brancaster; except includes FF
93	GRNO	Reduced	Fabric	Narr Valley Type Grey Ware	100	300	2-3C; as Darling 2001 NARR/NARO; and Peachey NAR RE1
94	GROG	Reduced	Group	Grog-tempered wares	50	410	
95	GROGF	Reduced	Group	Fine Grog Tempered Ware	50	410	
96	GROGRO	Reduced	Fabric	Grog-Tempered with Greensand Quartz	50	250	
97	GROL	Reduced	Fabric	Grey Sand tempered with Calcareous Oolites	50	200	
98	GRRO	Reduced	Group	Greyware with Greensand Quartz	50	410	
99	GRROC	Reduced	Group	Coarse Greyware with Greensand Quartz	50	410	
100	GRROE	Reduced	Fabric	Early Roman Sandy Ware with Greensand Quartz	100	200	
101	GRSA	Reduced	Fabric	Lincoln Early Oxidised Sandy Ware	50	70	Reduced sandy version of OXSA
102	GRSH	Grog and Shell	Group	Grog Tempered Wares with Shell	50	410	
103	GRWM	Reduced	Fabric	South Lincolnshire Grog Tempered Wheelmade	50	200	As Precious, Morton Saltern
104	GRYMIC	Reduced	Group	Micellaneous Micaceous Grey Wares (Sandy)	50	410	Not Wattisfield type; no specific source
105	GWATT	Reduced	Fabric	Wattisfield Type Micaceous Grey Ware	100	300	As Plouviez forthcoming
106	GYMS	Reduced	Group	Transitional Wheelmade Fabrics with Minimal Fine Shell	50	120	cf GREYSH for general grey fabrics with minimal shell content
107	H70	Amphora	Fabric	Halter 70 Amphorae	50	100	
108	HADOX	Fine	Group	Misc. Red-Surfaced Oxfordshire/Hadham Variants	200	410	
109	HORN	Reduced or Oxidised	Fabric	Horningsea Grey and Buffwares	75	350	Mostly 2-3C although products made from 1st to mid 4th C
110	HORNT	Reduced or Oxidised	Group	Horningsea Type Grey and Buffwares	100	300	Coarse sandy greywares from Cambridgeshire area - many are probably Horningsea products
111	HUNT	Calcareous	Fabric	Huntcliff Calcite Tempered Ware	360	410	
112	HWC	Fine	Fabric	Highgate Wood 'C' type	70	160	
113	IAETW	Reduced	Group	Iron Age Tradition Erratic Tempered Wares	-1000	1000	East Yorks/ North Lincs, very hard to date; this code only for vessels of certain IA date
114	IAFLINT	Oxidised or Reduced	Group	Iron Age Tradition Flint Tempered Wares	-1000	50	
115	IAGR	Reduced	Group	Iron Age Tradition Grit Tempered Wares	50	150	

	A	B	C	D	E	F	G
1	Fabric Code	Appendix	Ware Class	Fabric details	Earliest date	Latest date	Comment
116	IAGRCS	Reduced	Group	Iron Age Tradition Gritty Wares with calcareous sand	50	150	
117	IAGROG	Grog	Group	Iron Age Tradition Grog Tempered Wares	-700	100	
118	IALIM	Calcareous	Group	Iron Age Tradition Limestone Tempered	-700	100	
119	IAMSH	Shell	Group	Iron Age Tradition Handmade With Minimal Fine Shell	-700	150	
120	IAORG	Reduced	Group	Iron Age Tradition with Organic Inclusions	-1000	150	
121	IASA	Reduced	Group	Iron Age Tradition Sandy Wares	-700	100	
122	IASAF	Reduced	Group	Fine Iron Age Tradition Sand Tempered Fabrics	-100	100	
123	IASAOL	Calcareous	Group	Iron Age Tradition Sandy Fabric with Ooliths	-700	100	
124	IASH	Calcareous	Group	Iron Age Tradition Shell Tempered	-100	100	
125	IASHC	Shell	Group	Iron Age Tradition Coarse Shell Tempered	-1000	150	HG72
126	IASHF	Calcareous	Group	Iron Age Tradition Fine Shell Tempered	-100	100	
127	IMMC	Import	Group	Imported Mica Dusted Wares	50	100	Beakers
128	IT24	Amphora	Fabric	Italian Dr 2-4	70	100	
129	ITAMP	Amphora	Fabric	Undifferentiated Italian Amphorae	50	400	
130	K117	Amphora	Fabric	Sandy ribbed as Kingsholm 117	50	150	
131	KAP2	Amphora	Fabric	Kapitan II Amphorae	180	400	
132	KOAN	Amphora	Fabric	Koan/Dr 2-4 amphorae	50	100	
133	KOLN	Import	Fabric	Cologne Colour Coated Ware	100	140	
134	L555	Amphora	Fabric	London 555 Amphorae	50	120	
135	LCOA	Reduced	Fabric	Late Lincoln Coarse Pebbly Ware	350	410	Double lid-seated jars; variant of COAR
136	LCQU	Reduced	Fabric	Late Roman Coarse Quartz Gritted	300	410	NE Lincolnshire; within traditon of late coarse fabrics
137	LEG	Reduced	Fabric	Lincoln Cream/Light Grey 'Legionary' Ware	50	70	
138	LGRL	Reduced	Fabric	Lincoln Grey Ware with Light Firing Core	120	230	Sleaford
139	LGRL1	Reduced	Fabric	Lincoln Grey Ware with Light Firing Core - Type 1	120	230	Sleaford
140	LGRL2	Reduced	Fabric	Lincoln Grey Ware with Light Firing Core - Type 2	120	230	Sleaford
141	LOND	Reduced	Group	London 'Wares'	70	150	
142	LOOL	Calcareous	Group	Oolitic Tempered Wares	50	410	

	A	B	C	D	E	F	G
1	Fabric Code	Appendix	Ware Class	Fabric details	Earliest date	Latest date	Comment
143	LOXP	Oxid	Group	Lincoln pebbly oxidised ware	350	410	
144	LRGR	Reduced	Group	Late Roman Grog Tempered Wares	250	410	
145	LROL	Calcareous	Fabric	Late Roman Oolitic Gritted Ware	300	410	Sleaford (HOPS)
146	LROM	Amphora	Group	Undiferentiated Late Roman Amphorae	275	410	
147	LRRRA	Amphora	Group	Later Roman Ribbed Amphorae	200	410	
148	LRRB	Amphora	Fabric	Later Roman Red-Brown Amphora Fabric	250	410	Lincoln
149	LYON	Import	Fabric	Lyon Colour Coated Ware	50	70	
150	MARB	Import	Group	Misc. Marbled Wares	0	0	
151	MHAD	Fine	Fabric	Much Hadham Wares	200	400	
152	MHADR	Fine	Fabric	Much Hadham Reduced Wares	200	400	
153	MICA	Oxid	Group	Mica Dusted Wares	50	410	
154	MISC	Misc	Group	Misc Uncategorised	0	0	
155	MLEZ	Samian	Fabric	Micaceous Early Lezoux Ware	50	100	
156	MOBR	Mortaria	Fabric	Brampton Type Mortaria	100	200	As described in NFRC
157	MOCA	Mortaria	Fabric	Cantley Mortaria	270	350	
158	MOCO	Mortaria	Fabric	Colchester Mortaria	40	200	
159	MOCR	Mortaria	Fabric	Crambeck Mortaria	270	410	
160	MODR	Mortaria	Fabric	Dragonby/NorthLincolnshire Mortaria	100	200	
161	MODRWS	Mortaria	Fabric	Dragonby/NorthLincolnshire White Slipped Mortaria	100	200	
162	MOG	Mortaria	Group	Undiffertiated Grey Mortaria	50	410	
163	MOGA	Mortaria	Group	Undifferetiatiated Imported Gallic Mortaria	50	100	
164	MOHA	Mortaria	Fabric	Much Hadham mortaria	300	410	
165	MOHX	Mortaria	Group	Undifferetiatiated Hadham/Oxfordshire Mortaria	300	410	
166	MOIM	Mortaria	Group	Undiffertiate Imported Continental Mortaria	50	410	
167	MOLIN	Mortaria	Fabric	Lincoln Mortaria	50	200	
168	MOLO	Mortaria	Group	Local Mortaria	50	410	
169	MOMD	Mortaria	Group	Midlands Mortaria - Source Unknown	50	410	
170	MOMH	Mortaria	Fabric	Mancetter-Hartshill Mortaria	100	350	
171	MONG	Mortaria	Fabric	North Gaul Mortaria	50	100	
172	MONV	Mortaria	Fabric	Nene Valley Mortaria	100	400	
173	MONVC	Mortaria	Fabric	Nene Valley Colour Coated Mortaria	300	400	

	A	B	C	D	E	F	G
1	Fabric Code	Appendix	Ware Class	Fabric details	Earliest date	Latest date	Comment
174	MOOX	Mortaria	Fabric	Oxfordshire Parchment Ware Mortaria	250	410	
175	MOOXR	Mortaria	Fabric	Oxfordshire Red Slipped Mortaria	250	410	
176	MOOXW	Mortaria	Fabric	Oxfordshire White Slipped Mortaria	100	410	
177	MORH	Mortaria	Group	Rhenish Mortaria	150	250	
178	MORT	Mortaria	Group	Unclassified Mortaria Fabric	50	410	
179	MORV	Mortaria	Fabric	Gallic Mortaria (Rhône Valley)	50	100	
180	MOSC	Mortaria	Fabric	South Carlton Mortaria	140	200	
181	MOSF	Mortaria	Fabric	South Ferriby Mortaria	0	0	
182	MOSL	Import	Fabric	Moselkeramik	200	275	Rhenish; from Trier
183	MOSP	Mortaria	Fabric	Swanpool Mortaria	270	410	
184	MOSPC	Mortaria	Fabric	Swanpool Colour Coated Mortaria	300	410	
185	MOSPT	Mortaria	Group	Swanpool Type Mortaria	270	410	
186	MOTC	Mortaria	Fabric	Lincoln Technical College Mortaria	90	150	
187	MOVR	Mortaria	Fabric	Verulamium Region Mortaria	50	160	
188	MRRA	Amphora	Group	Mid-Roman Ribbed Amphorae	270	300	
189	NAAM	Amphora	Group	North African Amphorae	270	410	
190	NAT	Reduced	Group	Reduced Native Tradition Sandy Wares	-25	150	
191	NATF	Reduced	Group	Reduced Native Tradition Finewares	-25	150	
192	NELGR1	Reduced	Fabric	North East Lincolnshire Early Roman Wheelmade Fabric 1	70	200	Grimsby - Rowlandson, forthcoming
193	NFCC	Fine	Fabric	New Forest Colour Coated	260	370	
194	NGCR	Import	Fabric	North Gaulish Creamware	190	250	Butt beakers
195	NGGW	Import	Fabric	North Gaulish Greyware	70	300	
196	NVCC	Fine	Fabric	Nene Valley Colour Coated Ware	150	410	
197	NVCC1	Fine	Fabric	Nene Valley Colour Coated Ware - Early Fabric	150	410	
198	NVCC2	Fine	Fabric	Nene Valley Colour Coated Ware - Late Fabric	270	410	
199	NVCR	Oxidised	Fabric	Nene Valley Cream ware	150	410	
200	NVGCC	Fine	Fabric	Nene Valley Grey Colour Coated Ware	150	300	GRBS Tradition
201	NVGW	Reduced	Fabric	Nene Valley Grey Ware	120	300	
202	NVGWC	Reduced	Group	Nene Valley Grey Ware Type - Coarse Fabric	70	200	May Include fabrics from outside the Nene Valley

	A	B	C	D	E	F	G
1	Fabric Code	Appendix	Ware Class	Fabric details	Earliest date	Latest date	Comment
203	NVGM	Reduced	Fabric	Nene Valley Type Grey - Micaceous Variant	150	300	Source - Poss North Cambs/ Norfolk border or Suffolk
204	NVGY	Reduced	Fabric	Earlier Nene Valley Grey Ware	50	160	
205	NVGYS	Reduced	Fabric	Earlier Nene Valley Grey Ware with Rare Shell	50	160	
206	NVMIC	Fine	Fabric	Nene Valley Colour Coated Ware with Mica Overslip	150	410	
207	NVOX	Oxidised	Fabric	Nene Valley Oxidised Ware	150	410	c.f. Cooper 1989
208	NVPA	Oxidised	Fabric	Nene Valley Parchment Ware	150	410	
209	NWLGR	Reduced	Fabric	North West Lincolnshire Greyware	70	230	Gregory blue-grey fabric (Dragonby)
210	NWLMICA	Reduced	Fabric	North West Lincolnshire with Mica slip	70	230	Dragonby?
211	NWLOX	Oxidised	Fabric	North West Lincolnshire Oxidised	70	230	Dragonby?
212	OX	Oxidised	Group	Undifferentiated Oxidised Wares	50	410	
213	OXB	Oxidised	Fabric	Late Roman Burnished and Oxidised Ware	250	410	Late Roman SPOX type
214	OXC	Oxidised	Group	Undifferentiated Coarse Oxidised Wares	50	410	
215	OXF	Oxidised	Group	Undifferentiated Fine Oxidised Wares	50	410	
216	OXFIN	Oxidised	Group	Fine Oxidised Wares	50	410	
217	OXGR	Oxidised	Group	Oxidized Grog Tempered Wares	50	410	
218	OXGRIT	Oxidised	Group	Coarse Oxidised Fabrics with Large 'Grit' Inclusions	50	410	
219	OXL	Oxidised	Group	Light Oxidised Fabrics	50	200	
220	OXLC	Oxidised	Fabric	Light Oxidised Ware with Fine Calcareous Inclusions	50	150	Sleaford
221	OXMIC	Oxidised	Group	Oxidised Fine Micaceous Ware	70	300	
222	OXMS	Oxidised	Group	Oxidised Wheelmade with Minimal Shell	70	410	
223	OXO	Oxidised	Fabric	Oxfordshire Oxidised Ware	50	410	Not Colour Coated
224	OXPA	Oxidised	Fabric	Oxfordshire Parchment Ware	350	410	
225	OXRC	Fine	Fabric	Oxfordshire Red Colour Coated Ware	240	410	
226	OXSA	Oxidised	Fabric	Lincoln Early Oxidised Sandy Ware	50	70	
227	OXWS	Oxidised	Group	Oxidised Wares with a White Slip	50	410	
228	PARC	Oxidised	Group	Undifferentiated Parchment Wares	50	410	
229	PART	Reduced	Group	Parisian Type Wares	70	250	
230	PINK	Oxidised	Fabric	Lincoln Pink Micaceous Ware	50	70	
231	PRW	Import	Fabric	Pompeian Red Ware	50	150	

	A	B	C	D	E	F	G
1	Fabric Code	Appendix	Ware Class	Fabric details	Earliest date	Latest date	Comment
232	PRW1	Import	Fabric	Pompeian Red Ware Peacock 1977 1	50	100	
233	PRW2	Import	Fabric	Pompeian Red Ware Peacock 1977 2	50	100	
234	PRW3	Import	Fabric	Pompeian Red Ware Peacock 1977 3	50	150	
235	R527	Amphora	Fabric	Richborough 527 Amphorae	50	150	
236	RDSL	Oxidised	Fabric	Lincoln Early Red Slipped Ware	50	70	
237	RHOD	Amphora	Fabric	Rhodian Amphorae	50	150	
238	RLIM	Calcareous	Group	Roman Limestone Tempered Ware	50	410	South Lincolnshire
239	ROSAX	Reduced	Group	Indeterminate Roman or Saxon	50	800	
240	ROXGR	Reduced	Fabric	Roxby Grey Ware	140	200	
241	SAM	Samian	Fabric	Undifferentiated Samian Wares	50	230	
242	SAMCG	Samian	Fabric	Central Gaulish Samian Ware	120	200	
243	SAMCG-EG	Samian	Fabric	Central or East Gaulish Samian Ware	120	230	
244	SAMEG	Samian	Fabric	East Gaulish Samian Ware	150	300	
245	SAMLM	Samian	Fabric	Les Martres de Veyre Samian Ware	105	180	
246	SAMMT	Samian	Fabric	Montans Samian Ware	50	100	
247	SAMSG	Samian	Fabric	South Gaulish Samian Ware	50	100	
248	SC	Oxidised	Fabric	South Carlton Cream Ware	140	200	
249	SCCC	Oxidised	Fabric	South Carlton Colour Coated Ware	140	200	
250	SFGR	Reduced	Fabric	South Ferriby Greyware	70	250	
251	SFGROG	Reduced	Fabric	South Ferriby Grog Tempered Ware	50	230	
252	SFOX	Oxidised	Fabric	South Ferriby Oxidised Ware	50	230	
253	SFOXC	Oxidised	Fabric	South Ferriby Coarse Oxidised Ware	50	230	
254	SHEER	Calcareous	Group	Shell Gritted Wares with Erratics	-100	100	More shell than erratic content; E T WSH - more erratic than shell
255	SHEL	Calcareous	Group	Miscellaneous Undifferentiated Shell Tempered Wares	50	410	
256	SHELCO	Shell	Group	Undifferentiated Coarse Shell Tempered Wares	-1000	410	
257	SHELFO	Shell	Group	Undifferentiated Fine Shell Tempered Wares	-1000	410	
258	SHELPO	Calcareous	Group	Shell Gritted Wares Including Punctate Brachiopods	50	410	
259	NESHGR	Calcareous	Group	North East Lincolnshire Shell and Grog Tempered Wares	50	200	

	A	B	C	D	E	F	G
1	Fabric Code	Appendix	Ware Class	Fabric details	Earliest date	Latest date	Comment
260	SHGROG	Calcareous	Group	Undifferentiated Shell and Grog Tempered Wares	50	230	
261	SLSHB	Calcareous	Fabric	Bourne Shell Tempered Ware	160	300	
262	SLCR	Oxidised	Fabric	South Lincolnshire Cream Ware	70	200	
263	SLGFIN	Reduced	Fabric	South Lincolnshire Fine Grey Ware	50	200	Similar to SLCR
264	SLGR	Grog	Fabric	South Lincs Grog Tempered Ware	20	250	Handmade?; decayed shell
265	SLGY	Reduced	Fabric	South Lincs Grey Ware	50	160	c.f. NVGY
266	SMSH	Calcareous	Group	South Midlands Shell Tempered Wares	300	410	
267	SPAA	Amphora	Group	Undifferentiated Spanish Amphorae	50	410	
268	SPCC	Fine	Fabric	Swanpool Colour Coated Ware	300	410	
269	SPCCV	Fine	Fabric	Swanpool Colour Coated with Mica Slipped Surfaces	300	410	
270	SPIR	Oxidised	Fabric	Lincoln Late Roman Grooved Ware	350	410	"Spirally grooved"; See Darling 1999 and Darling and Precious forthcoming
271	SPOX	Oxidised	Fabric	Swanpool Oxidised Ware	300	410	
272	SPOXT	Oxidised	Group	Swanpool Type Oxidized Wares	300	410	Such products produced at Messingham among other places
273	SWCR	Calcareous	Fabric	Handmade Ware with Abundant Red Chalk	-100	100	North Lincs, South Ferriby "Woodworm Fabric"
274	GRSY	Reduced	Fabric	South Yorkshire Greyware	120	350	Products of kilns at Blaxton, Cantley and Rossington Bridge
275	TILE	Oxidised	Fabric	Tile Fabric Vessels	100	410	
276	TN	Import	Fabric	Terra Nigra	40	80	
277	TR	Import	Fabric	Terra Rubra	40	60	
278	TVC	Reduced	Fabric	Coarse Grog and Quartz Ware	50	200	Handmade; Navenby
279	TVFF	Reduced	Fabric	Early Fairly Fine Ware	50	200	Navenby
280	TVSA	Reduced	Fabric	Early to Mid Roman Sandy Ware	50	200	Navenby
281	VESIC	Unknown	Group	Vesicular Fabrics	-1000	410	
282	VRW	Oxidised	Fabric	Verulamium Region Whiteware	50	160	
283	WHEG	Import	Group	White Eggshell Wares	70	120	

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
2	AARD	ceramic	clau	Low countries highly decorated ware	med	1250	1400
3	AGATE	ceramic	dua	Agate ware	emod	1730	1770
4	AMHTC	ceramic	JY	Alford Manor Housetype Gritty ware	emed -med	1175	1250
5	AMHTG	ceramic	JY	Alford Manor House-type Glazed ware	emed-med	1175	1250
6	AMHTU	ceramic	JY	Alford Manor House-type Coarseware	emed-med	1175	1250
7	ANDA	ceramic	DUA	Andalusian lustreware	med	1250	1450
8	ANDE	ceramic	DUA	Andenne-type ware	sn-emed	1000	1200
9	ANGLIAN	ceramic	YAT	Anglian wares	esax-msax	450	850
10	ANGLIAN COARSE SST	ceramic	AGV	Anglian coarse sandstone tempered ware	esax-msax	450	850
11	ARCH	ceramic		Archaic maiolica	med	1270	1350
12	ASQSH	ceramic	LAS	Anglo-Saxon Quartz and Shell tempered	esax-msax	400	850
13	ASSHQ	ceramic	LAS	Anglo-Saxon Shell and Quartz tempered	esax	450	750
14	BA	ceramic	LAS	Bronze Age	prehist	0	0
15	BADO	ceramic	CLAU	Badorf-type ware	msax	750	1200
16	BALT	ceramic	clau	Baltic-type fabric	sn-emed	950	1200
17	BANDSL	ceramic	didsbury	Banded Slipware (modern industrial product)		1780	1900
18	BASALT	ceramic	LAS	Saxon Basalt-tempered	easx-msax	550	800
19	BATH A	ceramic	AGV	Bath Fabric A	emed	1000	1350
20	BATH B/D	ceramic	AGV	Bath Fabric B/D	emed	950	1150
21	BB1	ceramic	clau	Dorset Black Burnished ware	rom	120	410
22	BBAS	ceramic		Black Basalt	pmed	0	0
23	BEAG	ceramic	clau	Green glaze Beauvais type ware		1500	1600
24	BEAURP	ceramic	clau	Beauvais-type ware	lsax	900	1000

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
25	BEAY	ceramic	LAS	Beauvais Yellow	pmed	1500	1600
26	BERTH	ceramic	clau	Brown glazed earthenware	pmed	1550	1800
27	BEVO	ceramic	clau	Beverley Orange ware	emed-med	1150	1350
28	BEVO1	ceramic	LAS	Beverley Orange ware Fabric 1	emed	1100	1230
29	BEVO1T	ceramic	LAS	Beverley Orange-type ware Fabric 1	emed	1100	1230
30	BEVO2	ceramic	LAS	Beverley Orange ware Fabric 2	med	1230	1350
31	BEVO2T	ceramic	LAS	Beverley Orange-type ware Fabric 2	med	1230	1350
32	BEVOGT	ceramic	JY	Beverley type with Greensand		0	0
33	BL	ceramic		Black-glazed wares	pmed	1550	1750
34	BLBURN	ceramic	CLAU	Black Burnished wares	msax	700	900
35	BLBURNW	ceramic	agv	Grey and black burnished wares - white-core fabric	msax	650	850
36	BLGR	ceramic	clau	Paffrath-type or blue-grey ware	emed	1050	1200
37	BONC	ceramic	JY	Bourne or Colne-type Post- medieval	lmed-pmed	1450	1600
38	BORD	ceramic			pmed		
39	BORDB	ceramic		Brown glazed border ware	pmed	1620	1700
40	BORDG	ceramic		Green glazed Border ware	pmed		
41	BORDY	ceramic		Yellow glazed border ware	pmed	1550	1700
42	BORDY?	ceramic			pmed		
43	BOSTLMT	ceramic	JY	Boston Late Medieval type	lmed	1350	1450
44	BOSTLT	ceramic	LAS	Boston Glazed ware - Lincoln type	med	1230	1330
45	BOSTTT	ceramic	LAS	Boston Glazed ware - Toynton type	med	1230	1330
46	BOU	ceramic	clau	Bourne D ware	lmed-pmed	1350	1650
47	BOUA	ceramic	clau	Bourne-type Fabrics A, B and C	med	1150	1400

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
48	BOX	cbm	LAS	Roman box tile	rom	0	0
49	BR	ceramic	agv	Bristol Redcliffe ware	med	1250	1500
50	BR/G7	ceramic			med		
51	BR?	ceramic	agv	Bristol Redcliffe ware	med	1250	1500
52	BRANS	ceramic	YORK	Brandsby-type ware	med	1250	1350
53	BRBURN	ceramic	CLAU	Brown burnished wares	msax	700	900
54	BRED	ceramic	agv	Bredon-type floor tiles	med	1320	1360
55	BREDON	ceramic	agv	Bredon-type floor tiles	med	1320	1360
56	BRILL	ceramic		Brill type wares		1250	1500
57	BRIS	ceramic		Bristol stoneware	emod	1780	1950
58	BRIS A/B	ceramic	agv	Bristol A/B	emed	1050	1150
59	BRISTOL C	ceramic			emed		
60	BRK	cbm	LAS	Brick	med - post-med	0	0
61	BRKDISC	cbm	LAS	Brick (discarded)	med - post-med	0	0
62	BRS	ceramic	agv	Bristol Stoneware	emod	1750	1950
63	BRUNS	ceramic	clau	Brunnsum-type flasks	emed	1150	1200
64	BS	ceramic	clau	Brown stoneware	emod	1680	1850
65	BURNT CLAY	cbm		Burnt clay	na		
66	BYZAN1	ceramic	agv		med		
67	BYZAN2	ceramic	agv		med		
68	CAFECV	ceramic	JY	Calcareous Iron and Carbonised Vegetable tempered	esax	0	0
69	CALC	ceramic	mdbp	Calcite-tempered	rom	0	0
70	CALC?	ceramic	mdbp	Calcite-tempered?	rom	0	0
71	CALCT	ceramic	LAS/WESTH	calcite	esax-msax	0	0
72	CALG	ceramic	clau	Romano-British handmade calcite-gritted	rom	140	400
73	CALM	ceramic	mdbp	Shell - calcite tempered with minimal calcite	rom	0	0
74	CALOX	ceramic	mdbp	Oxidized calcite-tempered	rom	0	0
75	CALOX?	ceramic	mdbp	Oxidized calcite-tempered?	rom	0	0

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
76	CASG	ceramic	JY	Cambridgeshire Scraffito		0	0
77	cbm	cbm		Ceramic building material	na		
78	CBW	ceramic		Coarse Border ware	lmed		
79	CBW?	ceramic		Coarse Border ware	lmed		
80	CC	ceramic	DUA/CLAU	Colour-coated wares	rom	40	400
81	CCALC	ceramic	precious darling		rom	0	0
82	CEP	ceramic	CLAU	Chinese export porcelain	pmed	1640	1850
83	CH HK	ceramic	agv	Chepstow HK	med	1250	1450
84	CHAF	ceramic			esax-msax		
85	CHAFF	ceramic	agv		esax-msax		
86	CHAFF TEMP	ceramic			esax-msax		
87	CHARCOAL	non-ceramic		charcoal	na	0	0
88	CHARN	ceramic	agv	Charnwood ware	esax-msax	450	800
89	CHARNT	ceramic	clau	Charnwood ware	esax-msax	450	800
90	CHEA	ceramic			pmed	1350	1550
91	CHED E	ceramic	cheddar	Cheddar E ware	lsax	950	1050
92	CHFL	ceramic	JY	Chalk and Flint-tempered fabrics	esax	0	0
93	CHHK	ceramic	AGV	Chepstow Fabric HK	med	1250	1450
94	CHIMN	cbm	LAS	Chimney pot	med-emod	0	0
95	CHINS	ceramic	clau	Chinese stoneware		1200	1900
96	CHNK	ceramic	AGV	Chepstow Fabric NK	med	1250	1450
97	CHPO	ceramic		Chinese Export Porcelain	pmed	1640	1850
98	CHPO?	ceramic		Chinese Export Porcelain?	pmed		
99	CIST	ceramic	clau	Cistercian-type ware	pmed	1480	1650
100	CISTERCIA N/BLACKW ARE	ceramic	YORK	Cistercian ware and blackware	pmed	1490	1650
101	CITG	ceramic	clau	Central Italian tin-glazed ware	lmed	1480	1550
102	CLAY				na	0	0

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
103	CLAY TOBACCO PIPE	ctp	agv	Clay Tobacco Pipe	PMED	1600	1920
104	CLEEVE/ST BARTS	cbm		Cleeve Abbey/Gloucestter St Bartholomews-type Floor	med	1270	1300
105	CMP	ceramic	JY	Coal Measures Purple	late med-post med	1400	1600
106	CMW	ceramic	CLAU	Coal Measures whiteware	med-pmed	1250	1550
107	COAL	non-ceramic		coal	na		
108	COAR	ceramic	mdbp	Reduced misc Roman coarsewares	rom	0	0
109	COAR SAND TEMP	ceramic			nk		
110	COARSE SST	non-ceramic			esax-msax		
111	COLP	ceramic	LAS	Columbia plain	pmed	1525	1625
112	CONP	ceramic		Continental Porcelain	emod	1770	1900
113	CONP?	ceramic			emod	1770	1900
114	CR	ceramic	DUA/CLAU	Cream-bodied ware	rom		
115	CRAN	ceramic	agv	Cranham ware	emod	1770	1900
116	CRAN?	ceramic	agv	Cranham ware?	emod	1770	1900
117	CREA	ceramic	agv	Creamware	emod	1770	1830
118	CRGR	ceramic	mdbp	Crambeck greyware	rom	0	0
119	CRGR?	ceramic	mdbp	Crambeck greyware?	rom	0	0
120	CRGRV?	ceramic	mdbp	Crambeck greyware variant?	rom	0	0
121	CRMWARE	ceramic	clau	Creamware	emod	1770	1850
122	CROW	ceramic	clau	Crowland Abbey-type bowls	lsax	1020	1150
123	CRPA	ceramic	mdbp	Crambeck parchment ware	rom	0	0
124	CSST	ceramic			esax-msax		
125	CSTN	ceramic	agv	Cistercian ware	pmed	1500	1650
126	CT	ceramic	LAUNCESTON	Chert-tempered ware	sn-emed	1070	1250
127	CTP	ctp	agv	Clay Tobacco Pipe	PMED	1600	1920
128	CUNE	cbm	LAS	Cuneatus brick	Roman	0	0

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
129	DAUB	cbm		Daub	nk	0	0
130	DAUB/LOO M				na	0	0
131	DAUB?			daub	na	0	0
132	DAUB1	cbm	AGV	Daub fabric 1	na	0	0
133	DBERTH	ceramic	JY	Dark Brown-glazed earthenwares (Yorkshire PNK)	post-med	1680	1770
134	DERB	ceramic	clau	Derby-type ware	lsax	940	1080
135	DERBS	ceramic	agv	Derby Stoneware	emod	1830	1900
136	DERLSSH	ceramic	LAS	Derbyshire Late Saxon Shell-tempered ware	lsax	850	1020
137	DERMSH1	ceramic	LAS	Derbyshire Medieval Shell-tempered Fabric 1	med	1180	1350
138	DERMSH2	ceramic	LAS	Derbyshire Medieval Shell-tempered Fabric 2	med	1180	1350
139	DERMSH3	ceramic	JY	Derbyshire Medieval Shell-tempered Fabric 3	med	1180	1350
140	DERMSH4	ceramic	JY	Derbyshire Medieval Shell-tempered Fabric 4	med	1180	1350
141	DEVS	ceramic	agv;dua	Developed Stamford ware	emed	1150	1250
142	DGT	CERAMIC	LAUNCESTON	Decayed granite tempered	med	0	0
143	DONC	ceramic	clau	Doncaster Hallgate-type ware		1170	1250
144	DRAB	ceramic	LAS	Drab-coloured saltglaze stoneware	pmed	1720	1750
145	DRAIN	cbm	LAS	Drain (general)	med-mod	0	0
146	DRAINDISC	cbm	LAS	Drain (general) (discarded)	med-mod	0	0
147	DROIT	cbm	agv	Droitwich-type floor tiles	med	1350	1450
148	DROIT?	cbm	agv	Droitwich-type floor tiles	med	1350	1450
149	DST	ceramic	clau	Developed Stamford ware	emed	1150	1230
150	DUTR	ceramic	clau	Dutch Red Earthenware	med-pmed	1250	1650
151	DUTRT	ceramic	clau	Dutch Red Earthenware-types	pmed	1550	1650
152	EALMT	ceramic	clau	East-Anglian late medieval/transitional ware	lmed-pmed	1450	1550

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
153	Early sgraffito tiles	cbm	agv	early sgraffito tiles	med		
154	EARLY YORK GLAZED	ceramic	YORK	Early York glazed ware	med	1150	1250
155	ECHAF	ceramic	agv	Early to mid Anglo-Saxon chaff-tempered ware	esax-msax	450	800
156	ECHAFIG	ceramic	AGV	Early to Mid Anglo-Saxon Chaff-tempered - plus GSQ	esax-msax	650	850
157	ECHAFM	ceramic	AGV	Early to Mid Anglo-Saxon Chaff-tempered - micaceou	esax-msax	650	850
158	EGSW	ceramic	clau	Early German stonewares	med	1250	1300
159	ELDOX	ceramic	JY	East Lincolnshire Dull Oxidised		0	0
160	ELFEOL	ceramic	JY	East Lincolnshire Anglo-Saxon oolitic ironstone tempered	esax	400	650
161	ELFS	ceramic	CLAU	Early Fine-shelled ware	msax	780	950
162	ELGQC	ceramic	LAS	East Lincolnshire Glazed Quartz and Chalk fabrics	emed	1150	1220
163	ELQC	ceramic	LAS	East Lincolnshire Quartz and Chalk fabrics	emed	1100	1220
164	ELSW	ceramic	clau	Early Lincoln Glazed Ware	lsax	870	920
165	ELY	ceramic	LAS	Ely-type ware	med	1175	1350
166	EMCW	ceramic			emed		
167	EMED	ceramic	CLAU	Unidentified early medieval	emed	1150	1250
168	EMGR	ceramic	AGV	Early Medieval Grog-tempered	emed	1050	1150
169	EMHM	ceramic	clau	Early Medieval Handmade ware	emed-med	1100	1250
170	EMLF	ceramic	LAS	Early Medieval Light firing	emed-med	1080	1250
171	EMLOC	ceramic	clau	Local Early Medieval fabrics	emed	1150	1230
172	EMOD	ceramic	LAS	Early Modern wares	emod	1800	2000
173	EMS	ceramic	dua	Early Medieval Sandy ware	emed	1000	1150
174	EMSAX	ceramic	CLAU	ESAX or MSAX	esax-msax	400	870

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
175	EMSH	ceramic	DUA	Early Medieval Shell-tempered ware	emed	1050	1150
176	EMSS	ceramic	dua	Early Medieval Sand and Shell	emed	1000	1150
177	EMSW	ceramic	Norfolk	Norfolk Early Medieval Sandwich Ware	emed	0	0
178	EMW	ceramic	Norfolk	Norfolk Early Medieval Ware	sn-emed	1000	1250
179	EMX	ceramic	clau	Non-local Early Medieval fabrics	emed	1150	1230
180	ENGS	ceramic	agv	Unspecified English Stoneware	emod	1750	1900
181	ENPO	ceramic		English Porcelain	emod		
182	ERRA	ceramic	LAS/WESTH	erratic	esax-msax	450	800
183	ESAX	ceramic	CLAU	Early Saxon	esax-msax	400	700
184	ESAXIMP	ceramic	CLAU		esax-msax	0	0
185	ESAXLOC	ceramic	LAS	Early Anglo-Saxon Local wares	esax-msax	450	650
186	ESAXSH	ceramic	LAS	Anglo-Saxon Shell-tempered fabrics	esax	450	650
187	ESAXX	ceramic	CLAU	Non-local Anglo-Saxon Fabrics	esax-msax	400	700
188	ESBN	ceramic	LAS	Early Saxon Bone-tempered	esax	450	700
189	ESCSST	ceramic	LAS	Early Saxon Chalk and Sandstone tempered	esax	450	700
190	ESGS	ceramic	agv	Early to mid Anglo-Saxon Greensand quartz tempered	esax-msax	550	800
191	ESGSNL	ceramic	JY	North Lincolnshire Anglo-Saxon Greensand-tempered	easx-msax	0	0
192	ESSPIL	ceramic		Early Saxon Spilsby Sandstone-tempered	esax	450	700
193	EST	ceramic	CLAU	Early Stamford ware	lsax	870	1010
194	ETW	ceramic	IR	Erratic-tempered fabrics	BA-R	0	0
195	EYGW	ceramic	YAT	Early York Galzed ware	emed	1180	1230
196	EYO	ceramic	las	East Yorkshire Orangewares	med	1150	1350

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
197	EYQC	ceramic	LAS	East Yorkshire Quartz and Chalk tempered	med	1170	1250
198	FE	ceramic	agv	Ironstone tempered	esax-msax	550	800
199	FEOO	ceramic	LAS/WESTH	oolitic ironstone	esax-msax	0	0
200	FERTH	ceramic	CLAU	Fine earthenware	emod	1750	1900
201	Find	non ceramic	LAS	Bulk find		0	0
202	FINIAL	ceramic	LAS	Finial tile		0	0
203	FIREDCLAY			fired clay	na	0	0
204	FIREDCLAY + CHAFF			fired clay and chaff	na	0	0
205	FLEMISH	cbm	LAS	Flemish floor tile	lmed-pmed	0	0
206	FLINT	ceramic	LAS	Flint-tempered fabrics	preh-esax	0	600
207	FLOOR	cbm		Floor tile		0	0
208	FLQCA	ceramic	JY	Flint quartz and calcareous tempered	esax	0	0
209	FREC	ceramic	agv	Frechen stoneware	pmed	1530	1680
210	FREN	ceramic	clau	Unidentified French whitewares	med	1170	1650
211	FSS	ceramic	LAUNCESTON	fine shell sand tempered	med	0	0
212	GAU4	ceramic	clau	Gauloise 4	rom	50	250
213	GCP1	ceramic	agv	Goodrich Castle Post-med 1	pmed	1550	1650
214	GERMS	ceramic	clau	German slipwares	pmed	1580	1700
215	GERMW	ceramic	clau	German whiteware	pmed	1500	1650
216	GFIN	ceramic	precious darling		rom	0	0
217	GFLOOR	cbm	LAS	Glazed floor tile	med	0	0
218	GLAM	ceramic	AGV	Glamorgan-type ware	med	1250	1450
219	GLASS	non-ceramic		glass	na	0	0
220	GLGS	ceramic	CLAU	Glazed Greensand Fabrics	emed-med	1120	1350
221	GLGSF	ceramic	JY	Glazed Greensand and Flint tempered	med	1180	1300
222	GLOS110	ceramic	AGV	Gloucester TF110	lmed	1250	1500

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
223	GLOS15	ceramic		Gloucester TF15	rom		
224	GLOS43	ceramic		Gloucester TF43	emed		
225	GLOS43?	ceramic		Gloucester TF43?	emed		
226	GLOS79	ceramic	agv	Gloucester TF79	lmed	1350	1500
227	GLOSTF5	ceramic	gloucester	Gloucester TF5	rom		
228	GLQCF	ceramic	JY	Glazed Quartz Chalk and Flint		0	0
229	GM	ceramic	AGV	Great Malvern floor tile fabric	med	1450	1500
230	GMT	CERAMIC	LAUNCESTON	Granite and muscovite tempered	med	0	0
231	GNIB	cbm	LAS	Glazed nibbed tile	med	1150	1250
232	GPNR	cbm	clau	Glazed peg, nib or ridge	med to emod	0	0
233	GPNRDISC	cbm	clau	Glazed peg, nib or ridge (discarded)	med	0	0
234	GRBURN	ceramic	LAS	Imported Grey Burnished ware	msax	700	900
235	GRE	ceramic	clau	Glazed Red Earthenware	pmed	1500	1650
236	GREY	ceramic	clau	Romano-British greywares	rom	40	400
237	GRFF	ceramic	mdbp	Fine greyware	rom	0	0
238	GRID	ceramic		Glazed ridge tile	med	1150	1550
239	GRIM	ceramic	LAS	Grimston ware	med	1200	1550
240	GRIMT	ceramic	LAS	Grimston-type ware	med	1200	1550
241	GROG	ceramic	JY	Grog-tempered	IA to esax	0	0
242	GRQZ	ceramic	mdbp	Quartz-tempered greyware	rom	0	0
243	GRQZ?	ceramic	mdbp	Quartz-tempered greyware?	rom	0	0
244	GRSA	ceramic	mdbp	Reduced version of OXSA	rom	0	0
245	GRSAN	ceramic	mdbp	Reduced sandwich fabric Middleton	rom	0	0
246	GSS	ceramic	LAS	Greensand and shell	emed-med	1050	1250
247	GYG	ceramic	CLAU	Glazed Yorkshire Gritty ware	emed	1150	1250
248	HAMBL	ceramic	las	Hambleton-type ware	med	0	0
249	HAMBLETO N-TYPE	ceramic	YORK	Hambleton-type ware	med	1250	1550
250	HCSW	ceramic	HAU	Hull-type Coarse Sandy ware	med	1200	1400
251	HEDI	ceramic	DUA	Hedingham ware	med	1150	1250

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
252	HERA2	ceramic	hereford		med		
253	HERA6	ceramic	hereford		med		
254	HERA7B	ceramic	hereford		med		
255	HERA7B?	ceramic	hereford		med		
256	HERA7D	ceramic	hereford		pmed		
257	HERA7E	ceramic	hereford		pmed		
258	HERB1	ceramic	hereford		med		
259	HERB4	ceramic	hereford		med		
260	HERB5	ceramic	hereford		pmed		
261	HG	ceramic	agv	Ham Green ware	med	1150	1250
262	HIP	cbm	LAS	hip tile	med - post-med	0	0
263	HLKT	ceramic	CLAU	Horncastle-type LKT ware	lsax	920	1010
264	HMYG	ceramic	JY	Handmade Yorkshire Gritty Ware	sn-emed	1060	1230
265	HUM	ceramic	clau	Humberware	med-pmed	1250	1550
266	HUMB	ceramic	clau	Humber Basin fabrics	med	1250	1500
267	HUMB TYPE	ceramic	clau	Humber Basin fabrics	med	1250	1500
268	HUMBER	ceramic	YORK	Humber ware	med	1250	1550
269	HUMCH	ceramic	LAS	Humber Chalky Ware	med	0	0
270	HUY	ceramic	agv	Huy-type ware	LSAX	830	1130
271	IA	ceramic	LAS	Iron Age		0	0
272	IAERR	ceramic	AGV	Iron Age Erratic-tempered	late BA-late IA	0	0
273	IMB	cbm	CLAU	imbrex	rom	0	0
274	IMBDISC	cbm	LAS	imbrex (discarded)	rom	0	0
275	IMP	ceramic	clau	Unidentified imported wares	nk	450	1900
276	INDUS	cbm	LAS	Industrial ceramic building material	rom-mod	0	0
277	IPS	ceramic	clau	Ipswich-type ware	msax	730	850
278	IS	ceramic	CLAU	Imported stoneware (unidentified)	med-emod	1450	1900
279	ISAB	ceramic			pmed		
280	ISLG	ceramic	clau	Islamic Glazed	med	1250	1500

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
281	JACKFIELD WARE	ceramic	AGV	Jackfield ware	emod	1750	1900
282	JAPO	ceramic	LAS	Japenese porcelain	pmed-emod	1660	1900
283	KBRK	cbm	LAS	Kiln brick	ROM-pmed	0	0
284	KEUP	ceramic	clau	Mercian Mudstone-tempered fabric	esax-msax	450	800
285	KEUP*	ceramic	clau	Mercian Mudstone-tempered fabric	esax-msax	450	800
286	KEUP+CHA FF	ceramic	clau	Mercian Mudstone-tempered fabric	esax-msax	450	800
287	KEUPQ	ceramic	clau	Mercian Mudstone-tempered fabric	esax-msax	450	800
288	KFURN	cbm	LAS	kiln furniture	rom-mod	0	0
289	KING	ceramic	agv;dua	Kingston-type ware	med	1250	1400
290	KING?	ceramic	agv;dua	Kingston-type ware?	med	1250	1400
291	KLON	ceramic	Loughton		nk		
292	KOLN	ceramic	agv	Cologne stoneware	pmed	1500	1550
293	KOLN?	ceramic	agv	Cologne stoneware	pmed	1500	1550
294	KOLS	ceramic	clau	Cologne stoneware	pmed	1500	1550
295	KSTRUT	ceramic	JY	Kiln structure (fired clay)		0	0
296	KW1	cbm	agv	Kingswood Fabric One	med	1150	1550
297	KW2	cbm	agv	Kingswood Fabric Two	med	1250	1550
298	KW3	cbm	agv	Kingswood Fabric Three	med	1250	1550
299	LANDA		agv	Late Andalusian Lustreware	lmed	0	0
300	LANG	ceramic	clau	Langewehe stoneware	med-lmed	1350	1500
301	LANG?	ceramic	clau	Langewehe stoneware	pmed	1350	1500
302	LARA	ceramic	clau	Langerwehe/Raeren-type Stoneware	med	1350	1500
303	LATE HUMBER	ceramic	YORK	Late Humber-type ware	lmed	1450	1600
304	LAYERSTO CK?	ceramic			med		
305	LBLAK	ceramic	didsbury	Late Blackware (modern)		0	0

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
306	LBYSLP	ceramic	JY	Light Bodied Yorkshire Slipware	post-med	1700	1770
307	LCGR	ceramic		Low Countries Grey ware	med	1250	1500
308	LCGR/SHER	ceramic		Low Countries Grey or Hertfordshire Grey	med	1150	1300
309	LCOAR	ceramic	agv		med		
310	LCVDOX	ceramic	JY	Lincoln Clay Vale Dull Oxidised		0	0
311	LEILBGW	ceramic	LAS	Leicester Light-bodied Gritty ware	lmed	1350	1500
312	LEMS	ceramic	LAS	Lincolnshire Early Medieval Shelly	emed	1130	1230
313	LERTH	ceramic	clau	Late earthenwares	pmed	1750	1900
314	LESTOX	ceramic	JY	Leicestershire Oxidised	emed to med	0	0
315	LFLHUM	ceramic	JY	Light Firing Late Humberware	post-med	1550	1650
316	LFS	ceramic	LAS	Lincolnshire Fine-shelled ware	sn-emed	970	1200
317	LFS/ELFS	ceramic	LAS	Lincolnshire Fine-shelled or Early Fine-shelled	msax or sn-emed	780	1200
318	LG	ceramic	CLAU	Lincoln gritty ware	lsax	870	880
319	LGRIT	ceramic	didsbury	Lightly Gritted Ware (generic)		0	0
320	LHUM	ceramic	CLAU	Late Humber-type ware	pmed	1550	1750
321	LIGU	ceramic	clau	Ligurian Berretino tin-glazed ware	pmed	1520	1700
322	LIGU?	ceramic		Ligurian Berretino tin-glazed ware	pmed	1520	1700
323	LIM	ceramic	CLAU	Oolitic limestone-tempered fabrics	esax-msax	700	1070
324	LIM/SST	ceramic	clau	Limestone and sandstone tempered	esax-msax	550	800
325	LIMES	ceramic	LAS/WESTH	Limestone-tempered Anglo-Saxon	esax-msax	400	850
326	LIMSTONE	ceramic	LAS	Limestone-tempered Anglo-Saxon	esax-msax	400	850

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
327	LKT	ceramic	clau	Lincoln kiln-type shelly ware	lsax	850	1000
328	LKT?	ceramic	clau	Lincoln kiln type ware?	lsax	850	1000
329	LLON	ceramic	LAUNCESTON	Late London-type ware	lmed	0	0
330	LLSW	ceramic	clau	Late Lincoln Glazed ware	lmed	1350	1500
331	LMED	ceramic	clau	Unidentified late medieval wares	lmed	1350	1550
332	LMF	ceramic	LAS	Late Medieval Finewares	lmed-pmed	1400	1550
333	LMLOC	ceramic	clau	Late Medieval local fabrics	lmed	1350	1550
334	LMU	ceramic	norwich	Late medieval unglazed	lmed	0	0
335	LMUW	ceramic	LAS	Late Medieval Unglazed Ware (Norwich)	med	1350	1550
336	LMUWJ	ceramic	JY/Norfolk	Norwich Local Unglazed Ware Jugs	med	0	0
337	LMX	ceramic	clau	Late Medieval Non-local fabrics	lmed	1350	1550
338	LOCC	ceramic	clau	Sparsely Glazed ware	emed	1120	1180
339	LOND	ceramic	agv	London-type ware	emed	1100	1350
340	LOND?	ceramic			emed		
341	LONDCOAR	ceramic			emed		
342	LONS	ceramic	agv;dua	London Stoneware	pmed	1670	1800
343	LOOM				na	0	0
344	LPM	ceramic	clau	Early Modern wares (general term)	emod	1750	1900
345	LPMDISC	ceramic	LAS	Early modern (discarded)	emod	0	0
346	LS/SNLS	ceramic	CLAU	Late Saxon/Saxo-Norman Lincoln Sandy ware	lsax	850	1050
347	LSAX	ceramic	CLAU	Late Saxon	lsax	870	1120
348	LSAXX	ceramic	CLAU	Late Saxon Non-local Fabrics	lsax	850	1050
349	LSCRUC	ceramic	clau	Late Saxon Crucible Fabrics	lsax	870	1100
350	LSH	ceramic	clau	Lincoln shelly ware	lsax	850	1000
351	LSIMP	ceramic	CLAU	Late Saxon misc imported fabrics	lsax	870	1010
352	LSLOC	ceramic	CLAU	Late Saxon Local Fabrics	lsax	850	1050

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
353	LSLS	ceramic	CLAU	Late Saxon Lincoln Sandy ware	Isax	850	920
354	LSPLS	ceramic	clau	Lincoln Late Saxon Pale-bodied Sandy Ware	Isax	870	920
355	LSS	ceramic	DUA	London Late Saxon Shelly ware	Isax	880	1010
356	LST	ceramic			na1		
357	LSTON	ceramic	LAS	Late stoneware	emod	1780	1900
358	LSW	ceramic	LAS	Lincoln Glazed Sandy Ware	Isax to lmed	970	1500
359	LSW1	ceramic	clau	12th century Lincoln Glazed ware	emed	1100	1200
360	LSW1/2	ceramic	clau	12th-13th century Lincoln Glazed ware	emed	1100	1300
361	LSW2	ceramic	clau	13th to 14th century Lincoln Glazed Ware	med	1200	1320
362	LSW2/3	ceramic	clau	13th to 15th century Lincoln Glazed Ware	med	1200	1450
363	LSW3	ceramic	clau	14th to 15th century Lincoln Glazed Ware	med	1280	1450
364	LSW4	ceramic	clau	15th century Lincoln Glazed Ware	lmed	1450	1530
365	LSWA	ceramic	clau	Lincoln Glazed ware Fabric A	emed-med	1100	1500
366	LSWV	ceramic	JY	Lincoln Sandy ware variant		0	0
367	LSWV8	ceramic	JY	Lincoln Sandy ware variant Fabric 8	med	0	0
368	LSWV9	ceramic	JY	Lincoln Sandy ware variant Fabric 9		0	0
369	LSX	ceramic	CLAU	Non-local late Saxon fabrics	Isax	870	1080
370	LUGG	ceramic		North Herefordshire medieval	med		
371	LUGG FINE	ceramic		North Herefordshire fine medieval	med		
372	MAGR	ceramic	clau	Magrebi ware	med	1270	1350
373	MALV	ceramic	agv	Malvern Chase ware	med		

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
374	MAMPH	ceramic	clau	Roman/Medieval amphora	med	400	1700
375	MART	ceramic	agv	Martincamp stoneware	pmed	1450	1700
376	MARTABAN	ceramic	DUA	Martabani stoneware	pmed	1600	1700
377	MARTI	ceramic	clau	Martincamp ware - Type 1	pmed	1480	1550
378	MARTII	ceramic	clau	Martincamp ware - Type 2	pmed	1500	1600
379	MARTIII	ceramic	clau	Martincamp red earthenware	pmed	1600	1750
380	MAX	ceramic	CLAU	Northern Maxey-type ware	msax	680	870
381	MAXQ	ceramic	CLAU	South Lincs maxey-type ware	msax	670	800
382	MAY	ceramic	clau	Mayen-type ware	msax	650	900
383	MC1	ceramic	Loughton	Medieval shell-tempered	med	1150	1350
384	MED	ceramic	clau	Unidentified medieval	med	1050	1550
385	MED SANDY	ceramic			med		
386	MED. PMED	ceramic			med		
387	MED.TILE	cbm			med		
388	MEDLOC	ceramic	clau	Medieval local fabrics	med	1150	1450
389	MEDX	ceramic	clau	Non Local Medieval Fabrics	med	1150	1450
390	MEDX/ STAN LY	ceramic	clau	Lyveden/Stanion or unknown limestone tempered	med	1150	1300
391	MERC	ceramic			pmed		
392	METS	ceramic	DUA	Metropolitan Slipware	pmed	1600	1700
393	MG	ceramic	DUA	Mill Green ware	med	1270	1350
394	MGCOAR	ceramic	dua	Coarse Mill Green ware	med	1270	1350
395	MICA SST	ceramic			na	0	0
396	MIMP	ceramic	clau	Unspecified Medieval imports	med	1200	1500
397	MINETY	ceramic	agv	Minety ware	emed	1100	1550
398	MISC	ceramic	agv	Unidentified types	nk	400	1900
399	MISC COLEFORD ?	ceramic			pmed		
400	MISC HLY	ceramic	dua	Misc shell and limestone- tempered ware	lsax	1050	1150

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
401	MISC HSW	ceramic			nk		
402	MISC HY	ceramic		Misc handmade shelly	nk		
403	MISC ILSY	ceramic		Unident: iron-rich, limestone and quartz inclusion	med	1450	1550
404	MISC ISW	ceramic			nk		
405	MISC ISY	ceramic		Unident: iron-rich and quartz inclusions; handmade	med	1450	1550
406	MISC KW	ceramic			nk		
407	MISC KY	ceramic			nk		
408	MISC LSKNW	ceramic	agv	Misc limestone & quartz sand; clear glaze & slipped	nk		
409	MISC LSY	ceramic		Misc handmade limestone and quartz tempered	nk		
410	MISC LY	ceramic		Misc handmade limestone tempered	nk		
411	MISC MGW	ceramic	DUA;AGV	Unidentified: micaceous, green-glazed, wheelthrown	med	1150	1550
412	MISC MLW	ceramic	DUA	Miscellaneous micaceous limestone tempered wares	na	0	0
413	MISC MSKW	ceramic		Misc micaceous sandy	nk		
414	MISC MSY	ceramic		Unident: muscovite and quartz inclusions; handmade	med	1450	1550
415	MISC MW	ceramic	agv	Misc micaceous wheelthrown	nk		
416	MISC MY	ceramic			nk		
417	MISC NGW	ceramic			nk		
418	MISC NGY	ceramic			nk		
419	MISC NKW	ceramic		Misc no visible inclusions, clear glazed	nk		
420	MISC NW	ceramic	agv	Miscellaneous wheelthrown with sparse inclusions	nk		
421	MISC NY	ceramic		Misc handmade with no common inclusions	nk		

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
422	MISC RED	ceramic			nk		
423	MISC SGW	ceramic	dua	Misc quartz tempered	nk		
424	MISC SGY	ceramic		Misc quartz tempered	nk		
425	MISC SILTY	cbm	agv	Miscellaneous fabric with abundant quartz silt	nk		
426	MISC SKW	ceramic		Misc quartz tempered	nk		
427	MISC SKY	ceramic		Misc quartz tempered	nk		
428	MISC SW	ceramic		Misc quartz tempered	nk		
429	MISC SXKW	ceramic			nk		
430	MISC SXY	ceramic			nk		
431	MISC SY	ceramic		Misc handmade quartz tempered	nk		
432	MISC WHITE NGW	ceramic			nk		
433	MISC/A10	cbm			nk		
434	MISCDISC	cbm		misc roof tile (discarded)	nk	0	0
435	MISSING	-		missing	nk		
436	MKGSW1	ceramic	LAS	Milton Keynes Saxo-Norman Grey Sandy ware	sn	1000	1200
437	MKGSW2	ceramic	LAS	Milton Keynes Medieval Grey Sandy ware	med	1200	1400
438	MKGSW3	ceramic	LAS	Milton Keynes Medieval Grey Sandy ware	med	1200	1400
439	MKGSW4	ceramic	LAS	Milton Keynes Fine Grey Sandy ware	sn-med	1000	1300
440	MKSH1	ceramic	LAS	Milton Keynes Early Medieval Shell-tempered	emed	1000	1200
441	MKSH2	ceramic	LAS	Milton Keynes Medieval Shell-tempered	med	1200	1400
442	MLOJ	ceramic	LAS	Montelupo oil jar	emod	1800	1900
443	MMAX	ceramic	CLAU	RMAX with quartz	msax	700	800

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
444	MOCR	ceramic	mdbp	Crambeck mortaria	rom	0	0
445	MOCR?	ceramic	mdbp	Crambeck mortaria?	rom	0	0
446	MOD			Modern	mod		
447	MOD TILE	cbm	agv	Modern moulded tile	emod	1850	1950
448	MODBRICK DISC	cbm		modern brick (discarded)	emod	0	0
449	MODDRAIN	cbm		modern land drain	emod	0	0
450	MODDRAIN DISC	cbm		modern land drain (discarded)	emod	0	0
451	MODERN				mod		
452	MODERN BRICK	cbm		Modern brick	emod	1850	1950
453	MODTIL	cbm	LAS	Modern tile	pmed	0	0
454	MODTILDIS C		LAS	Modern tile (discarded)		0	0
455	MONG	ceramic	mdbp	North Gaulish mortaria	rom	0	0
456	MONMOUT	cbm		Monmouth-type floor tiles	lmed	1450	1500
457	MOULD	ceramic	LAS	Mould fragments	undated	0	0
458	MP	ceramic	agv	Midlands Purple ware	lmed-pmed	1380	1600
459	MS	ceramic	LAUNCESTON	Mixed sand temper	NA	0	0
460	MSAX	ceramic	CLAU	Mid-Saxon	msax	650	870
461	MSAXIMP	ceramic	CLAU	Mid Saxon imported	msax	0	0
462	MSAXLOC	ceramic	CLAU	Local middle Saxon fabrics	msax	700	850
463	MSAXX	ceramic	CLAU	Non-local mid-Saxon fabrics	msax	650	870
464	MSSHEL	ceramic	agv	Mid Saxon Shelly ware	msax	700	850
465	MST	ceramic	LAUNCESTON	Mixed sandstone tempered	sn-emed	0	0
466	MTIL	cbm	agv	Medieval tile (unspecified)	med	1150	1550
467	MTILE	cbm	agv	Unidentified medieval roof tile	med	1150	1550
468	MVAL	ceramic	clau	Mature Valencian Lustreware	lmed	1430	1500
469	MY	ceramic	AGV	Midlands Yellow ware	pmed	1550	1650
470	MY/STSL	ceramic			pmed		
471	MY?	ceramic			pmed		
472	NAAM	ceramic	clau	North African amphora	rom	150	410

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
473	NCBCB	ceramic	JY	Nineteenth Century Brown Colour-bodied	emod	1800	1950
474	NCBW	ceramic	agv	19th-century Buff ware	emod	1800	1900
475	NCSW	ceramic	LAS	Nottingham Coarse Sandy ware	med	1200	1500
476	NDC	CERAMIC	LAUNCESTON	North Devon calcareous	lmed	0	0
477	NDFW	CERAMIC	DUA	North Devon Fine ware	pmed	1650	1900
478	NDGT	ceramic	DUA	North Devon Gravel-Tempered ware	pmed	1600	1900
479	NDM	CERAMIC	LAUNCESTON	North Devon medieval	med	0	0
480	NEMCS	ceramic	NOTTINGHAM	Nottingham Early Medieval Coarse Sandy ware	emed	1080	1130
481	NEMSS	ceramic	JY/Norfolk	Norfolk Early Medieval Sparse Shelly Ware	emed	0	0
482	NEOT	ceramic			lsax		
483	NESP	ceramic	LAS	Nottingham Early Splashed ware	sn-emed	1080	1130
484	NEWG	ceramic	JY/LAS	Newark Glazed ware	med	1200	1230
485	NEWS	ceramic	CLAU	Newark-Type ware	lsax	970	1040
486	NFM	ceramic	clau	North French Monochrome	med	1150	1350
487	NFRE	ceramic	clau	Early North French ware	emed	1000	1150
488	NFREM	ceramic	clau	North French - Picardy?	emed	1150	1250
489	NG	ceramic	JY	Northern Gritty ware	med	1180	1450
490	NH	ceramic	agv	Nash Hill ware	med	1250	1500
491	NH?	ceramic	agv	Nash Hill ware	med	1250	1500
492	NHSLIP	ceramic	clau	North Holland slipwares	pmed	1570	1750
493	NIB	cbm		Nibbed tile	med-pmed	0	0
494	NIBDISC	cbm		Nibbed tile (discarded)	med-pmed	0	0
495	NIMS	ceramic	DUA	North Italian Marbled Slipware	pmed	1550	1650
496	NITALS	ceramic	clau	North Italian Sgraffito ware	lmed	1550	1700
497	NLCS	ceramic	LAS	North Lincolnshire Coarse Sandy ware	med	1175	1400

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
498	NLEMS	ceramic	LAS	North Lincolnshire Early Medieval Shelly	emed	1130	1230
499	NLFMSW	ceramic	LAS	North Lincolnshire Fine to Medium Sandy ware	emed-med	1150	1450
500	NLFS	ceramic	LAS	North Lincolnshire Fine-Shelled ware	sn-emed	975	1100
501	NLFSW	ceramic	LAS	North Lincolnshire Fine Sandy ware	emed-med	1150	1320
502	NLG	ceramic	LAS	North Lincolnshire Gritty ware	sn to emed	1050	1200
503	NLGCS	ceramic	LAS	North Lincolnshire Glazed Coarse Sandy ware	emed-med	1150	1300
504	NLGQC	ceramic	LAS	North Lincolnshire Glazed Quarz and Chalk	emed	1120	1220
505	NLGTCW	ceramic	LAS	North Lincolnshire Grit-tempered Coarse ware	sn-emed	1000	1200
506	NLLFSW	ceramic	LAS	North Lincolnshire Light-firing Sandy ware	med	1200	1450
507	NLLSG	ceramic	LAS	North Lincolnshire Late Saxon Grey ware	lsax	850	1050
508	NLMUW	ceramic	JY/Norfolk	Norwich Local Unglazed Ware	emed-med	0	0
509	NLOXSW	ceramic	LAS	North Lincolnshire Oxidised Sandy ware	med	1200	1450
510	NLQC	ceramic	LAS	North Lincolnshire Quartz and Chalk-tempered ware	sn-emed	1050	1220
511	NLQO	ceramic	LAS	North Lincs Quartz and Oolite	sn-emed	0	0
512	NLQS	ceramic	LAS	North Lincolnshire Quartz and Shell Fabrics	sn-emed	950	1220
513	NLST	ceramic	LAS	North Lincolnshire Shell-tempered	med	1180	1450
514	NLSTCW	ceramic	LAS	North Lincolnshire Sand-tempered Coarse ware	sn-emed	1000	1200
515	NNET	ceramic	JY	North Nottinghamshire Erratic-tempered	esax	0	0

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
516	NNRQFE	ceramic	JY	North Nottinghamshire Anglo-Saxon rounded quartz and Iron	esax	0	0
517	NNSQ	ceramic	JY	North Nottinghamshire Anglo-Saxon Shell & Quartz tempered	esax-msax	0	0
518	NOTG	ceramic	clau	Nottingham glazed ware	med	1250	1500
519	NOTGE	ceramic	NOTTINGHAM	Early Nottingham Green Glazed ware	med	1200	1230
520	NOTGI	ceramic	NOTTINGHAM	Iron-rich Nottingham Green Glazed ware	med	1200	1230
521	NOTGL	ceramic	NOTTINGHAM	Light Bodied Nottingham Green Glazed ware	med	1220	1320
522	NOTGR	ceramic	NOTTINGHAM	Reduced Nottingham Green Glazed ware	med	1280	1420
523	NOTLBG	ceramic	LAS	Nottingham Light-bodied Gritty ware	lmed	1380	1480
524	NOTLGW	ceramic	LAS	Late Nottingham Glazed ware	lmed	1350	1450
525	NOTS	ceramic	agv	Nottingham stoneware	pmed	1690	1900
526	NOTTS	ceramic	clau	Nottingham Late Saxon sandy ware	lsax	0	0
527	NRSW	ceramic	LAS	Nottingham Reduced Sandy ware	sn	850	1200
528	NSP	ceramic	clau	Nottingham Splashed ware	emed	1100	1250
529	NUNEATON ?	ceramic			med		
530	NVCC	ceramic	CLAU;DUA	Nene Valley Colour Coated	rom	200	400
531	NWLLFSW	ceramic	JY	North West Lincolnshire Light Firing Sandy ware	med	1200	1350
532	NWLWS	ceramic	JY	North West Lincolnshire White-slipped	med	1200	1350
533	NYLFLM	ceramic	JY	North Yorkshire Light Firing Late Medieval	lmed	1400	1550

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
534	NYW	ceramic	AGV	North Yorkshire whiteware	med	1250	1550
535	NYWW	ceramic	las	North Yorkshire whiteware	med	0	0
536	NYWWC	ceramic	AGV	North Yorkshire Whiteware - calcareous inclusions	med	1250	1500
537	NYWWF	ceramic	AGV	North Yorkshire Whiteware - fine	med	1250	1500
538	NYWWG	ceramic	AGV	North Yorkshire Whiteware - gritty	med	1250	1500
539	NYWWS	ceramic	AGV	North Yorkshire Whiteware - calcareous inclusions	med	1250	1500
540	OLIV	ceramic			pmed		
541	OPSIG	cbm	LAS	Opus Signinum	rom	0	0
542	ORP	ceramic	CLAU	Other red-painted wares	msax	700	1000
543	OX	ceramic	DUA/CLAU	Oxidized ware	rom		
544	OXAC	ceramic	Oxford	Late Saxon & Early Medieval West Oxfordshire and Early Medieval Oxford ware	lsax-emed	0	0
545	OXAG?	ceramic			emed		
546	OXAM	ceramic	agv	Oxford Fabric AM (Brill/Boarstall ware)	med	1250	1500
547	OXAM?	ceramic	agv	Oxford Fabric AM (Brill/Boarstall ware)	med	1250	1500
548	OXQZ	ceramic	mdbp	Quartz-tempered oxidized ware	rom	0	0
549	OXR	ceramic	Oxford	Oxfordshire St Neots-type	sn	0	0
550	OXSA	ceramic	mdbp	Early Roman oxidized sandy ware	rom	0	0
551	OXWS	ceramic	clau	Oxidised white-slipped wares	rom	40	400
552	OXY	ceramic	Oxford	Late Saxon-Medieval Oxford ware	lsax-med	1050	1300
553	PAEMSF	ceramic	JY	Peterborough Area Early medieval Shell and Iron	emed	110	1230
554	PANT	cbm	LAS	Pantile	pmed	1600	1900

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
555	PANTDISC	cbm		Pantile (discarded)	pmed	1660	1900
556	PASL	ceramic	JY	Peterborough Area Shell and Limestone-tempered	med	1200	1350
557	PCALC	ceramic			late prehist/roman		
558	PEAR	ceramic	DUA	Pearl ware	emod	1770	1900
559	PEARL	ceramic	agv	Pearlware	emod	1770	1900
560	PEG	cbm	clau	Peg tile	med	0	0
561	PEGNIB	cbm	LAS	Peg and Nibbed tile	med	1170	1700
562	PEN	ceramic	DUA	PEN Ware	pmed	1640	1700
563	PENHOW	ceramic	AGV	Penhow ware/Chepstow Fabric HA	med	1150	1350
564	PERR	ceramic			late prehist		
565	PEVSX1	ceramic	AGV	Pevensey Saxon 1	esax	400	650
566	PEVSX2	ceramic	AGV	Pevensey Saxon 2	esax	400	650
567	PEVSX3	ceramic	AGV	Pevensey Saxon 3	esax	400	650
568	PEVSX4	ceramic	AGV	Pevensey Saxon 4	sn-emed	1050	1250
569	PEVSX5	ceramic	AGV	Pevensey Saxon 5	sn-emed	850	1050
570	PEVSX6	ceramic	AGV	Pevensey Saxon 6	mlsax	850	1050
571	PEVSX7	ceramic	AGV	Pevensey Saxon 7	mlsax	850	1050
572	PEVSX8	ceramic	AGV	Pevensey Saxon 8	sn-emed	1050	1250
573	PGE	ceramic	CLAU	Pale Glazed Earthenware	pmed	1600	1750
574	PGW	ceramic	YORK	Purple glazed ware	epmed	1500	1600
575	PING	ceramic	clau	Pingsdorf-type Ware	sn-emed	1000	1200
576	PLAS	non-ceramic			na	0	0
577	PMBL	ceramic	DUA	Post-Medieval Black-glazed	pmed	1600	1700
578	PMBRILL	ceramic	LAS	Post-medieval Brill type ware	pmed	0	0
579	PMED	ceramic		Post-medieval Red Earthenwares	pmed	1500	1800
580	PMF	ceramic	CLAU	Post-medieval fine whiteware	pmed	1650	1750
581	PMFR	ceramic	DUA	Post-medieval fine redware	pmed	1600	1700
582	PMIMP	ceramic	clau	Post-medieval Import	pmed	1500	1800
583	PMLOC	ceramic	clau	Post-medieval Local fabrics	pmed	1450	1700

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
584	PMR	ceramic	DUA	London Post-medieval Redware	pmed	1600	1750
585	PMRC	ceramic	YORK	Post-medieval red coarse wares	pmed	1550	1900
586	PMRED	ceramic	AGV	Misc Post-Medieval redware	pmed	1550	1900
587	PMWE	ceramic	YORK	Post-medieval white earthenwares and slipwares	pmed	1550	1750
588	PMX	ceramic	clau	Post-medieval Non-local fabrics	pmed	1500	1800
589	PNR	cbm	clau	Peg, nib or ridge tile	med to early modern	0	0
590	PNRDISC	cbm	clau	Discarded peg, nib or ridge tile	med to early modern	0	0
591	PORC	ceramic	LAS	Porcelain	pmed-emod	1700	1900
592	PORTF	ceramic	clau	Portugese tin-glazed wares	pmed	1600	1700
593	POTST	ceramic	LAS	Potterspury type ware	med	1250	1500
594	POTT	ceramic	clau	Potterhanworth-type Ware	med	1250	1500
595	POTTG	ceramic	LAS	Potterhanworth Glazed ware	med	1180	1500
596	PRE1	ceramic	loughton	prehistoric	preh	-3500	60
597	PREH	ceramic	LAS	Prehistoric wares	preh	-4500	50
598	PREH1	ceramic	AGV	Prehistoric flint tempered	PREH	-2000	0
599	PSHW	ceramic	JY	Peterborough Shelly Ware	med	1175	1400
600	PSHW2	ceramic	JY	Peterborough Shelly Ware Fabric 2	med	1175	1400
601	QTZ SAND	ceramic			nk		
602	QUERN	non-ceramic		quernstone	na		
603	R	ceramic	clau	Roman pottery	rom	40	400
604	RAER	ceramic	clau;dua	Raeren stoneware	pmed	1450	1600
605	RAER?	ceramic	clau;dua	Raeren stoneware?	pmed	1450	1600
606	RBRK	cbm	CLAU	Roman brick	rom	0	0
607	RBRKDISC	cbm		Roman brick (discarded)	rom	0	0
608	RCAL	ceramic	DIDSBURY	Roman Calcareously-tempered wares	Roman	40	425

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
609	RCC	ceramic	DIDSBURY	Roman Colour-coated wares	Roman	40	400
610	RED SANDY	ceramic		Sandy redwares	med		
611	REDCH	ceramic	LAS	Reduced Chalky ware	med	0	0
612	REDUCED CHALKY	ceramic	agv	Reduced chalky ware	med	1000	1250
613	REFR	ceramic	DUA	Refined Red Earthenware	emod	1730	1800
614	REST	ceramic	LAS	Red stoneware	pmed	1730	1780
615	RFURN	cbm	CLAU	Roof furniture	emed-pmed	1150	1650
616	RG0	ceramic	DIDSBURY	Roman Greywares (general)	Roman	40	400
617	RG1	ceramic	DIDSBURY	Blue-grey Burnished ware	Roman	100	300
618	RG2	ceramic	DIDSBURY	Black-faced sandy ware	Roman	120	250
619	RG3	ceramic	DIDSBURY	Coarsely tempered Greywares	Roman	40	400
620	RG4	ceramic	DIDSBURY	Coarsely tempered Greywares	Roman	40	400
621	RG5	ceramic	DIDSBURY	Grog-tempered	Roman	100	200
622	RGRE	ceramic	CLAU	Reduced glazed red earthenware	pmed	1600	1850
623	RGV	ceramic	DIDSBURY	Roman Vesicular ware	Roman	0	400
624	RID	cbm	CLAU	Unidentified ridge tile	med	1150	1550
625	RIDDISC	cbm	LAS	Ridge tile (discarded)	med to emod	0	0
626	RIDFIN	ceramic	LAS	ridge tile with finial hole		0	0
627	RLSAX	ceramic	LAS	Roman or Late Saxon	Roman or Isax	50	1000
628	RM	ceramic	DIDSBURY	Roman Mortaria	Roman	40	400
629	RMAX	ceramic	CLAU	Southern Maxey-type ware	msax	650	950
630	ROMAN	ceramic		Roman	rom	0	0
631	ROUEN	ceramic	clau	Rouen-type Ware	med	1150	1350
632	ROUEN A	ceramic	clau	Rouen-type ware Fabric A	med	0	0
633	ROUEN B	ceramic	clau	Rouen-type ware Fabric B	med	0	0
634	ROUEN C	ceramic	clau	Rouen-type ware Fabric C	med	0	0
635	ROUEN E	ceramic	clau	Rouen-type ware Fabric E	med	0	0
636	ROX	ceramic	DIDSBURY	Roman Oxidised Fabrics	Roman	40	400
637	RPOT	ceramic		Roman pottery	rom		
638	RPOT?	ceramic		Roman pottery	rom		

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
639	RQCL	ceramic	LAS	Central Lincolnshire Early to Mid Saxon Rounded Quartz Fabric	esax-msax	450	750
640	RQOOL	ceramic	JY	Rounded Quartz and Oolite	esax-msax	450	800
641	RS	ceramic	DIDSBURY	Roman Samian	Roman	40	250
642	RSH	ceramic	DIDSBURY	Roman Shelly wares	Roman	0	425
643	RTIL	cbm		Roman tile	rom		
644	RTIL/MALV	cbm			rom		
645	RTIL?	cbm		Roman tile	rom		
646	RTILC	cbm			rom		
647	RTILDISC	cbm		discarded Roman tile	rom	0	0
648	RTILI	cbm			rom		
649	RTILL	cbm			rom		
650	RTILM	cbm			rom		
651	RTILO	cbm			rom		
652	RTILO?	cbm			rom		
653	RTILR	cbm			rom		
654	RTILS	cbm			rom		
655	RTMISC	cbm	LAS	Roman or post-Roman brick or tile	rom-med	0	0
656	RTMISCDIS C	cbm	LAS	Roman or post-Roman miscellaneous tile (discarded)	rom or med	0	0
657	RYDALE	ceramic	YORK	Rydale ware	pmed	1550	1750
658	RYEDALE	ceramic	YORK	Ryedale ware	pmed	1550	1700
659	SAIC	ceramic	LAS	Saintonge clear-glazed sgraffitto-decorated ware	med	1250	1350
660	SAIG	ceramic	clau;dua	Saintonge green-glazed ware	med	1280	1500
661	SAIG?	ceramic	clau;dua	Saintonge green-glazed ware?	med	1280	1500
662	SAIM	ceramic	clau;dua	Saintonge mottled glazed ware	med	1250	1500
663	SAIM?	ceramic	clau;dua	Saintonge mottled glazed ware?	med	1280	1500
664	SAIN	ceramic	clau;dua	Saintonge ware (unspecified type)	med	1280	1500

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
665	SAIN/TUDG	ceramic		Saintonge or Tudor Green ware	med	1280	1500
666	SAIP	ceramic	clau;dua	Saintonge polychrome ware	med	1280	1500
667	SAIPM	ceramic	clau	Post-medieval Saintonge	med	1500	1650
668	SAIU	ceramic	clau;dua	Saintonge unglazed ware	med	1250	1550
669	SAM	ceramic	Loughton	samian	rom	40	250
670	SAMCG	ceramic	clau;dua	Central Gaulish Samian Ware	rom	100	200
671	SAMEG	ceramic	mdbp	East Gaulish Samian ware	rom	0	0
672	SAMEG?	ceramic	mdbp	East Gaulish Samian ware?	rom	0	0
673	SAMIAN	ceramic		Samian ware	rom	60	250
674	SAMLFFE	ceramic	JY	Stamford Area Medieval Light Firing with Iron	med	1200	1350
675	SAMLFRQ	ceramic	JY	Stamford Area Medieval Light Firing Rounded Quartz	med	1200	1350
676	SAND TEMP	ceramic			nk	0	0
677	SANDY CLAY				na	0	0
678	SANDY DAUB	cbm		sandy daub	na	0	0
679	SC	ceramic	LAUNCESTON	South Cornish micaceous ware	med	0	0
680	SCAR	ceramic	clau;YORK	Scarborough ware	med	1150	1350
681	SCAR?	ceramic		Scarborough ware	med	1150	1350
682	SCS	ceramic	LAUNCESTON	South Cornish micaceous plus shell	med	0	0
683	SEEMS	ceramic	agv	South Essex Early Medieval Sandy	emed	1050	1150
684	SELTZ	ceramic	LAS	Seltzer bottle	pmed-emod	1750	1900
685	SELZ	ceramic	DUA	Selzer bottles	pmed	1750	1900
686	SESH	ceramic	dua	South Essex Shelly	med	1050	1250
687	SESHL	ceramic	agv	South Essex Late Saxon Shelly	lsax	900	1050
688	SESHS	ceramic	AGV	Sandy South Essex shelly	med	1150	1250

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
689	SEVIL	ceramic	clau	Seville-type	pmed	1450	1650
690	SEW	ceramic	agv	South-east Wiltshire ware	emed	1050	1250
691	SHEL	ceramic	clau	Romano-British shelly wares	rom	40	400
692	SHELL	ceramic	didsbury	Shell-tempered ware (generic)		0	0
693	SHELLSST				nk	0	0
694	SHELS	ceramic	AGV	London shell-tempered ware - sandy	emed	1000	1150
695	SHER/DERI T	ceramic			emed		
696	SHER?	ceramic			emed		
697	SHREWSBU RY	ceramic			emed		
698	SHREWSBU RY?	ceramic			emed		
699	SIEB	ceramic	clau	Siegburg-type Ware with brown slip	lmed-pmed	1450	1550
700	SIEG	ceramic	clau	Siegburg-type Ware	med-pmed	1250	1550
701	SILTY MICACEOU S DAUB	cbm		silty micaceous daub	nk	0	0
702	SL	ceramic	LAUNCESTON	Slate-tempered ware	med	0	0
703	SLAG	non-ceramic		slag	nk	0	0
704	SLBTOL	ceramic	JY	South Lincolnshire Baston-type Oolitic	med	1200	1350
705	SLBTOX	ceramic	JY	South Lincolnshire Baston-type Oxidised	med	1200	1350
706	SLEMO	ceramic	LAS	South Lincolnshire Early Medieval Oolitic	emed	1100	1220
707	SLEMOFE	ceramic	JY	South Lincolnshire Early Medieval Oolite and Iron-tempered	emed	1100	1230
708	SLEMS	ceramic	LAS	South Lincolnshire Early Medieval Shelly	emed	1150	1230

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
709	SLIP	ceramic	CLAU	Unidentified slipware	pmed	1650	1750
710	SLLFO	ceramic	JY	South Lincolnshire Medieval Light Firing Oolitic	med	1200	1350
711	SLLFOFQ	ceramic	JY	South Lincolnshire Light Firing Oolitic Iron and Quartz	med	1200	1500
712	SLMCW	ceramic	LAS	South Lincolnshire Medieval Coarseware	med	1180	1400
713	SLOOL	ceramic	LAS	South Lincs Oolitic (generic)	sn-med	1050	1500
714	SLOQ	ceramic	LAS	South Lincolnshire Oolite & Quartz	sn-emed	0	0
715	SLQO	ceramic	LAS	South Lincolnshire Quartz & Oolitic	sn-emed	0	0
716	SLQOF	ceramic	LAS	South Lincolnshire Quartz Oolite & Iron	sn-emed	0	0
717	SLQSO	ceramic	LAS	South Lincolnshire Quartz Shell & Oolite	sn-med	0	0
718	SLSF	ceramic	LAS	South Lincolnshire Shell & Iron	sn-emed	0	0
719	SLSHCW	ceramic	LAS	South Lincolnshire Shell-tempered coarseware (generic)	emed-med	1100	1400
720	SLSNOL	ceramic	LAS	South Lincolnshire Saxo-Norman Oolitic	sn	1050	1200
721	SLSNT	ceramic	JY	South Lincolnshire St. Neots-type	sn	980	1100
722	SLSO	ceramic	LAS	South Lincolnshire Shell & Oolite	sn-emed	1000	1230
723	SLSOF	ceramic	LAS	South Lincolnshire Shell Oolitic & Iron	sn-emed	1000	1230
724	SLSQ	ceramic	LAS	South Lincs Shell and Quartz (generic)	med	1200	1500
725	SLSQF	ceramic	LAS	South Lincs Shell Quartz and Iron (generic)	med	1200	1500

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
726	SLST	ceramic	clau	South Lincolnshire Shell Tempered ware	med	1150	1250
727	SLSTCW	ceramic	LAS	South Lincolnshire Sand-tempered Coarseware	sn-emed	1000	1150
728	SLY	ceramic	LAUNCESTON	yellow-bodied slate-tempered ware	med	0	0
729	SN	ceramic	CLAU	Saxo-Norman	sn	870	1200
730	SN1	ceramic	Loughton	St Neots type ware	lsax	850	1150
731	SNEOT	ceramic	CLAU	St Neots-type ware	sn-emed	870	1200
732	SNIMP	ceramic	clau	Saxo-Norman imported fabrics	sn	870	1150
733	SNLOC	ceramic	LAS	Local Saxo-Norman fabrics	sn	870	1150
734	SNLS	ceramic	CLAU	Saxo-Norman Lincoln Sandy Ware	lsax	970	1080
735	SNTG	ceramic		South Netherlands tin-glazed wares	pmed	1480	1570
736	SNTG?	ceramic		South Netherlands tin-glazed wares	pmed	1480	1570
737	SNX	ceramic	LAS	Non-local Saxo-Norman Fabrics	sn	870	1150
738	SPAM	ceramic	agv;dua	Merida-type ware	pmed	1250	1650
739	SPAM?	ceramic	agv;dua	Merida-type ware?	pmed	1250	1650
740	SPARC	ceramic	CLAU	Sparry calcite-tempered fabrics	esax-msax	400	870
741	SPTG	ceramic	clau	Spanish tin-glaze	med	1250	1550
742	SS	ceramic	LAUNCESTON	Shell and slate sand-tempered	med	0	0
743	SSM	ceramic	LAUNCESTON	Shell and slate sand-tempered plus muscovite	med	0	0
744	SSOM	ceramic	agv	South Somerset (Donyatt) ware	pmed	1550	1900
745	SSOM?	ceramic	agv	South Somerset (Donyatt) ware?	pmed	1550	1900
746	SSP	ceramic	Loughton		nk		

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
747	SST	ceramic	agv	Early to mid Saxon sandstone-tempered	esax-msax	550	800
748	SST+CHAF F	ceramic			esax-msax		
749	SST?	ceramic		Early to mid Saxon sandstone-tempered	esax-msax	550	800
750	SSTCL	ceramic	LAS	Central Lincolnshire Early to mid Saxon sandstone-tempered	esax-msax	450	750
751	SSTMG	ceramic	LAS	Early to mid Saxon sandstone-tempered (carboniferous sandstone)	esax-msax	450	750
752	SSTNL	ceramic	JY	Northern Lincolnshire Early to mid Saxon sandstone-tempered	esax-msax	0	0
753	SSW	ceramic	Loughton	SSW - Shelly-sandy ware	med	1150	1200
754	ST	ceramic	clau	Stamford Ware	lsax-emed	970	1200
755	STAM	ceramic	agv	Stamford Ware	emed	1000	1150
756	STAM?	ceramic	agv	Stamford Ware	emed	1000	1150
757	STAMT	ceramic	clau	Stamford-type variants	sn	950	1150
758	STANLY	ceramic	clau	Stanion/Lyveden ware	med	1150	1250
759	STAR	ceramic	Alan	Star Costrel	pmed	1600	1650
760	STAX	ceramic	AGV	Staxton-type ware	med	1150	1500
761	STAXT	ceramic	AGV	Staxton-type ware	emed	0	0
762	STBRS	ceramic			pmed		
763	STBRSL	ceramic			pmed		
764	STCO	ceramic	DUA	Staffordshire combed press-moulded ware	pmed	1650	1800
765	STCO (RED)	ceramic			pmed		
766	STCOAR	ceramic	dua	Staffordshire coarseware	pmed	1650	1900
767	STCOAR?	ceramic			pmed	1650	1900
768	STCRUC	ceramic	CLAU	Stamford-type Crucible	lsax-emed	850	1150

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
769	STCW	ceramic	didsbury	Sand-tempered Coarseware (generic)		0	0
770	STEM	ceramic			pmed		
771	STGR	ceramic	LAS	Staffs Glazed Redware (Astbury-type)	pmed	1720	1750
772	STILE	stone	LAS	Stone tile	rom-mod	0	0
773	STMO	ceramic	agv	Staffordshire/Bristol mottled-glazed	pmed	1690	1800
774	STONE	non-ceramic		stone	na	0	0
775	STRE	ceramic	dua	Staffordshire redware	pmed	1630	1750
776	STRE?	ceramic		Staffordshire redware	pmed	1630	1750
777	STROAT	ceramic	AGV	Stroat Ware	pmed	1550	1660
778	STROAT?	ceramic		Stroat Ware	pmed	1550	1660
779	STSL	ceramic	agv	Staffordshire/Bristol slipware	pmed	1680	1800
780	STSL?	ceramic		Staffordshire/Bristol slipware	pmed	1680	1800
781	STSLBR	ceramic		Staffordshire brownslipped slipware	pmed	1700	1770
782	SUND	ceramic	DUA	Sunderland coarseware	pmed	1800	1900
783	SWSG	ceramic	agv	Staffordshire White Saltglazed stoneware	pmed	1700	1770
784	SWSG SLIPPED	ceramic	agv	Staffordshire slipped white saltglazed stoneware	pmed		
785	SWSG?	ceramic		Staffordshire White Saltglazed stoneware	pmed	1700	1770
786	SWSGSL	ceramic			pmed		
787	SWW	ceramic			med		
788	SYLG	ceramic	LAS	South Yorkshire lightly gritted ware	med	1200	1400
789	T1	cbm			med		
790	T2	cbm			med		
791	TATING	ceramic	agv	Tating ware	msax	850	950
792	TB	ceramic	clau	Toynton/Bolingbroke wares	late med-pmed	1450	1750
793	TEG	cbm		Tegula	rom	0	0

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
794	TEGDISC	cbm	LAS	Tegua (discarded)	Roman	0	0
795	TESS	cbm	LAS	Tessarae		0	0
796	TGE	ceramic	clau	Tin-glazed earthenware	pmed	1550	1750
797	TGEM	ceramic	clau	Early Tin-glazed earthenware	pmed	1550	1650
798	TGETIL	cbm	LAS	Tin-glazed tile		0	0
799	TGW	ceramic	agv	Tin-glazed ware	pmed	1640	1770
800	TGW/VALE?	ceramic			pmed		
801	THET	ceramic	DUA	Ipswich Thetford-type ware	lsax	880	1050
802	THETT	ceramic	clau	Thetford-type fabrics	sn	1000	1150
803	thin two-colour tiles	cbm		thin two-colour tiles	med		
804	TILE	cbm		Tile fabric	med	1150	1500
805	TORK	ceramic	YORK	Torksey ware	lsax	850	1100
806	TORKT	ceramic	clau	Torksey-type ware	lsax	850	1100
807	TOY	ceramic	clau	Toynton Medieval Ware	med	1250	1450
808	TOYBT	ceramic	JY	Toynton Bourne-type	med	1300	1500
809	TOYCALC	ceramic	JY	Calcareous Toynton-type	med	1250	1350
810	TOYII	ceramic	clau	Toynton Late Medieval ware	lmed	1450	1550
811	TPW	ceramic	agv	Transfer printed ware	emod	1770	1900
812	TUDB	ceramic	DUA	Tudor Brown ware	pmed	1450	1600
813	TUDC	ceramic	AGV	Tudor Redware - calcareous body	pmed	1450	1550
814	TUDES	ceramic			pmed	0	0
815	TUDFR	ceramic	AGV	Tudor Redware - fine micaceous	pmed	1450	1550
816	TUDG	ceramic	agv	Tudor Green ware	pmed	1400	1550
817	TVW	ceramic	AGV	Tees Valley ware	med	1250	1450
818	Tyler Hill	ceramic			med		
819	UGRE	ceramic	didsbury	Unglazed Red Earthenware (modern)		0	0
820	UGRIT	ceramic	didsbury	Unattributed Gritty ware		0	0

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
821	UNGS	ceramic	clau	Unglazed Greensand-tempered fabrics	lsax-med	950	1250
822	UNID				nk	0	0
823	VALE	ceramic			lmed		
824	VOU	cbm	LAS	Voussoir brick		0	0
825	WALB	ceramic	CLAU		msax	0	0
826	WALL	ceramic	JYC	Wall tile	pmed-emod	0	0
827	WALMGATE	ceramic	YORK	Walmgate ware	lmed	1350	1450
828	WEMS	ceramic	CLAU	Wheelthrown Early Medieval Shell-tempered	sn-emed	1050	1220
829	WERRA	ceramic	clau	Werra ware	pmed	1570	1650
830	WERRAT	ceramic	clau	Werra-type ware	pmed	1570	1650
831	WESE	ceramic	DUA	Weser Slipware	pmed	1550	1650
832	WESER	ceramic	clau	Weser ware	pmed	1550	1650
833	WEST	ceramic	clau;dua	Westerwald stoneware	pmed	1600	1800
834	WEST/RAE R	ceramic		Westerwald/Raeren stoneware	pmed		
835	WHITE	ceramic	agv	Modern whiteware	emod	1850	1900
836	WINCH	ceramic			lsax		
837	WLQS	ceramic	LAS	West Lincolnshire Medieval Quartz and Shell Tempered	med	1200	1500
838	WLSS	ceramic	JY	Wheelthrown Late Saxon Shell-tempered	lsax	980	1080
839	WLSSFE	ceramic	JY	Wheelthrown Late Saxon Shell and Iron-tempered		0	0
840	WLSSQ	ceramic	JY	Wheelthrown Late Saxon Shell & Quartz-tempered	lsax	980	1080
841	WLSSQF	ceramic	JY	Wheelthrown Late Saxon Shell Quartz and Iron-tempered		0	0
842	WORCS	ceramic	agv	Worcester ware	emed	1050	1300
843	WPIPE	cbm	JY	Waterpipe	Rom-med	0	0
844	WS	ceramic	clau	White stoneware	pmed	1700	1770

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
845	YAREA	ceramic	LAS	York Area Medieval Glazed Fabrics	med	0	0
846	YELLOW	ceramic			emod		
847	YG	ceramic	clau	Yorkshire gritty ware	sn-emed	1050	1250
848	YHMG1	ceramic	JY	York Handmade Type 1	msax-lsax	850	880
849	YORK	ceramic	YORK	York glazed ware/York White ware	emed-med	1150	1300
850	YORK GRITTY	ceramic	YORK	York Gritty ware	emed	1000	1250
851	YORK LIGHTLY GRITTED	ceramic	YORK	South Yorkshire lightly gritted ware	med	1200	1400
852	YORK SANDY RED	ceramic	YORK	York Sandy Red wares	med	1200	1500
853	YORK SPLASHED	ceramic	YORK	York splashed wares	sn-emed	1050	1250
854	YORK WHITE	ceramic			med		
855	YORKA		CLAU		lsax	0	0
856	YORKD		CLAU		lsax	0	0
857	YORKSHIR E RED	ceramic	YORK	Yorkshire red ware	med	1150	1350
858	YORKSPL	ceramic	clau	York Splashed ware	sn-emed	1080	1200
859	YQC	ceramic	JY/CC	Yorkshire Quartz and Chalk	Saxo-Norman	1140	1230
860	YRGG	ceramic	LAS	York Area Reduced Green Glaze	lmed	0	0
861	YSLC	ceramic	JY	Yorkshire Slip-coated	post-med	1700	1770
862	YSP	ceramic		York splashed ware	med	0	0
863	YSRW	ceramic	LAS	York Sandy Red wares	med	1200	1500
864	YW	ceramic	YORK	Anglo-Scandinavian York Ware	lsax	850	1000

	A	B	C	D	E	F	G
1	cname	class	naming system	Fabric details/full name	period	earliest date	latest date
865	Ywa	ceramic	LAS	York Glazed aka York White ware	med	0	0
866	YY	ceramic	JY	Yorkshire Yellow	post-med	1500	1650