

ARCHAEOLOGICAL FIELD MANUAL

Fornleifastofnun Íslands



© FSÍ 2003
3rd Edition

Archaeological Field Manual © FSÍ

Fornleifastofnun Íslands
Bárugötu 3
101 Reykjavík
Iceland

Tel/Sími: 551 1033

Fax: 551 1047

Email/Netfang: fsi@instarch.is

Webpage/Heimasíða: www.instarch.is

Edited by Gavin Lucas

with the assistance of Jenny Bredenberg, Adolf
Fridriksson, Hildur Gestsdóttir, Howell Roberts, Mjöll
Snæsdóttir, Oscar Aldred and Orri Vésteinsson.

CONTENTS

1. Site Preparation

- 1.1 The Site Grid
- 1.2 The Site Hut
- 1.3 Use and Care of Tools
- 1.4 Health and Safety

2. Introduction to Excavation and Recording

- 2.1 The Excavation Process
- 2.2 Stratigraphy and the Matrix
- 2.3 The Recording Process
- 2.4 Samples and Finds

3. The Field Record

- 3.1 The Registers
- 3.2 The Unit Sheet
- 3.3 The Group Sheet
- 3.4 Photography

4. Finds

- 4.1 Retrieval
- 4.2 Recording
- 4.3 On-site Conservation

5. Sampling

- 5.1 Types of Samples
- 5.2 Recording

Appendix: English-Icelandic/Icelandic-English Glossary

Preface to the Third Edition

This third and greatly revised edition of the field manual aims to provide a basic guide to the methods used by the Icelandic Institute of Archaeology/Fornleifastofnun Íslands (FSÍ) on its excavations. It is based on the single context recording system developed in England but with unique modifications; in particular, this edition covers new changes to the basic recording sheets, chiefly the adoption of a single A3 combination sheet of the written and drawn record. As in previous editions, it is arranged in sections which deal with various processes involved in the excavation and recording of sites, including an introduction to the basic principles of stratigraphy and the methods of recording. Subsequent sections outline the conventions used in drawing plans and sections and writing descriptions of the deposits and other stratigraphic components which make up the site. Procedures for the retrieval and processing of finds and the taking of environmental samples are also described and at the back of the manual is a glossary of specialist terms used in Icelandic archaeology, in both Icelandic-English and English-Icelandic.

1. SITE PREPARATION

1.1 The Site Grid

Before any excavation, the location of the site and a grid within which excavation takes place needs to be established. The site can be located on 1: 50,000 Staðfræðikort scale maps or 1: 25,000 for certain areas (Landmælingar Íslands), but you should use known reference points relating to a national grid or tie the site grid into such with a GPS. There are two national grids in use in Iceland, **Hjörsey** (HJ55) and the newer system, **ISN93**, so make sure you know in which system your co-ordinates are.

The site grid should be marked out in the ground using secure, easily visible pegs or pins on a 5m pattern (i.e. with pegs every 5m) over the entire area to be excavated. Each peg should be marked with two number co-ordinates, eastings first followed by northings which refer to a point of origin. The point of origin, at the southwest corner of the grid, will be 000/000 and should be placed at the most southern and westerly point of the excavation area, or preferably well outside the intended excavation area to allow for unforeseen extension.

Once established, this site grid becomes the basis of locating all excavation trenches and archaeological features or finds. All survey and planning will use this site grid to measure from and all plans should mark and label at least two grid points on any scale drawing so that all drawings can be correlated.

1.2 The Site Hut

The 'site hut' is the place where the records, finds, samples and equipment for the excavation are stored – and also often the place where people take breaks. Because it serves a lot of functions and has many people passing through, it is important to keep it tidy and in order. The space should be organized according to its functions. Minimally there needs to be separate areas or spaces for:

Records

Tools & Equipment

Finds

Samples

You are responsible for your own records, tools, finds and samples, so make sure they go to their proper place when you have finished with them. Nevertheless, it is a good idea to appoint a 'site hut monitor' whose job it is to make sure the site hut rules are observed.

1.3 Use and Care of Tools

Good tools and proper handling of them are essential to conducting a proper excavation. The main tools of an archaeologist are:

Trowel – used for standard excavation of most small deposits and for cleaning areas. Always have a trowel to hand – it is the basic tool on site.

Hoe/Krafser – used for cleaning large areas and sometimes for shaving off such layers

Spade – used for cutting turf or thick deposits, or ‘shaving’ large layers.

Shovel – used for scooping up loose soil and transferring it to a wheelbarrow or spoil heap. Use your legs and arms to carry the weight, NOT your back.

Bucket & Hand shovel – used for scooping and transporting small amounts of loose soil from the excavation area.

Wheelbarrow – used for transporting loose soil from the site to a spoil heap. Do not overfill it beyond your ability to move it. Always use designated barrow runs, and if it is wet, be very careful not to slip.

Tools should be cleaned of all dirt at the end of every day by scraping with you trowel. Do not put dirty tools into the site hut – it makes it dirty and makes the tools harder to use

the next day, and the next person will only have to clean up after you. Occasionally you may need to sharpen some tools, especially trowels and spades – use a grinder or whetstone.

1.4 Health and Safety

Excavations are potentially dangerous places. Care should be taken at all times to avoid injury to yourself and others by following a few simple rules:

Always read the **risk assessment** of potential hazards on the site. A copy of this should be in the site hut.

Always wear proper boots on site, ideally ones with steel toe-caps. NEVER walk barefoot.

When using large tools such as spades or shovels, always make sure you know who is around you and where they are standing.

In wet weather take extra care as the ground can become very slippery. Load your wheelbarrows less, and make sure barrow runs are scraped free of dirt.

If you are in a deep excavation, especially if your head is below the level of the ground surface, always wear a hard hat to protect your head from falling soil or rocks, and always make sure someone knows that you are there. Deep excavations should always be shored.

If you are working on a site with a machine, keep well away unless you have a reason to be close by; NEVER walk behind a machine and always make sure the driver or operator can see you. Always wear a hard hat and bright clothing.

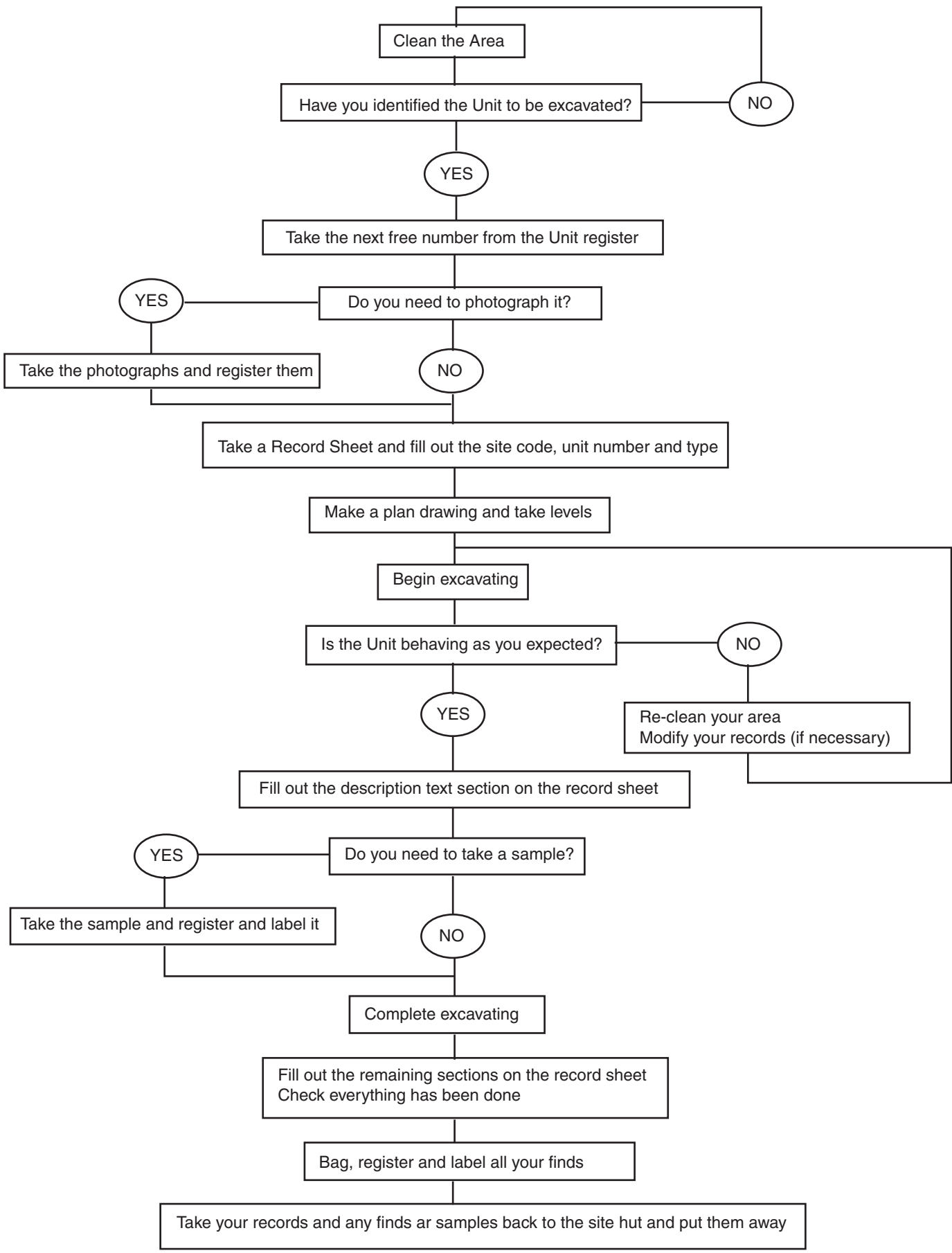
2. INTRODUCTION TO EXCAVATION AND RECORDING

2.1 The Excavation Process

The excavation process always involves two things: **excavation** itself and **recording** what you have excavated. You should NEVER excavate something on site without producing a full and proper record. To do so only compromises the excavation. To avoid such problems, there are a number of simple steps you should always go through during excavation and these are represented in the flow chart shown.

The basic processes involved in excavation are threefold: **cleaning, identification** and **excavation**. The first thing to do when excavating is to clean the area in which you will be excavating, until you are confident about the extent and edges of the deposit or feature you will be excavating. Only when you have identified the edges of the unit, should you start excavation. Usually this process is on a continual loop – as excavation proceeds, you should regularly clean your area to ensure your original identification is correct before excavating further. Sometimes it happens that it goes wrong; then you need to stop and re-think your original identification before excavating any more.

NEVER CARRY ON EXCAVATING IF YOU DO NOT KNOW WHY OR WHAT YOU SHOULD BE LOOKING FOR. IF YOU DO NOT KNOW WHAT TO DO NEXT, ALWAYS ASK FOR HELP.



2.2 Stratigraphy and the Matrix

The basic principle to understanding any archaeological site is that of stratigraphy; an archaeological site is conventionally seen as being composed of any number of stratigraphic **units** or contexts, which are characterised by discrete differences in the material matrix of a site. Most units found on a site will be one of two basic types: **deposits** (units which are additive or positive) and **cuts** (units which are subtractive or negative).

Deposits involve the addition of material onto a site, while cuts involve the removal of such material. While deposits are composed of a solid mass, cuts are only the trace or scar left behind after the removal of a solid mass. Examples of positive units include layers, fills, walls, floors or skeletons; examples of negative units include postholes, pits, levelling or graves. Details on how to record these two types are described in Section 3 of this manual.

Each discretely defined unit in the field is assigned a unique number (unit number) and excavated and recorded separately from any other unit. Critical in this process is the identification of the stratigraphic relationship between one unit and any other; there are only three possible relationships between any two units:

Later than/above

Earlier than/below

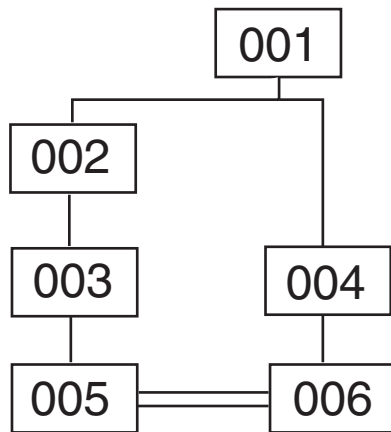
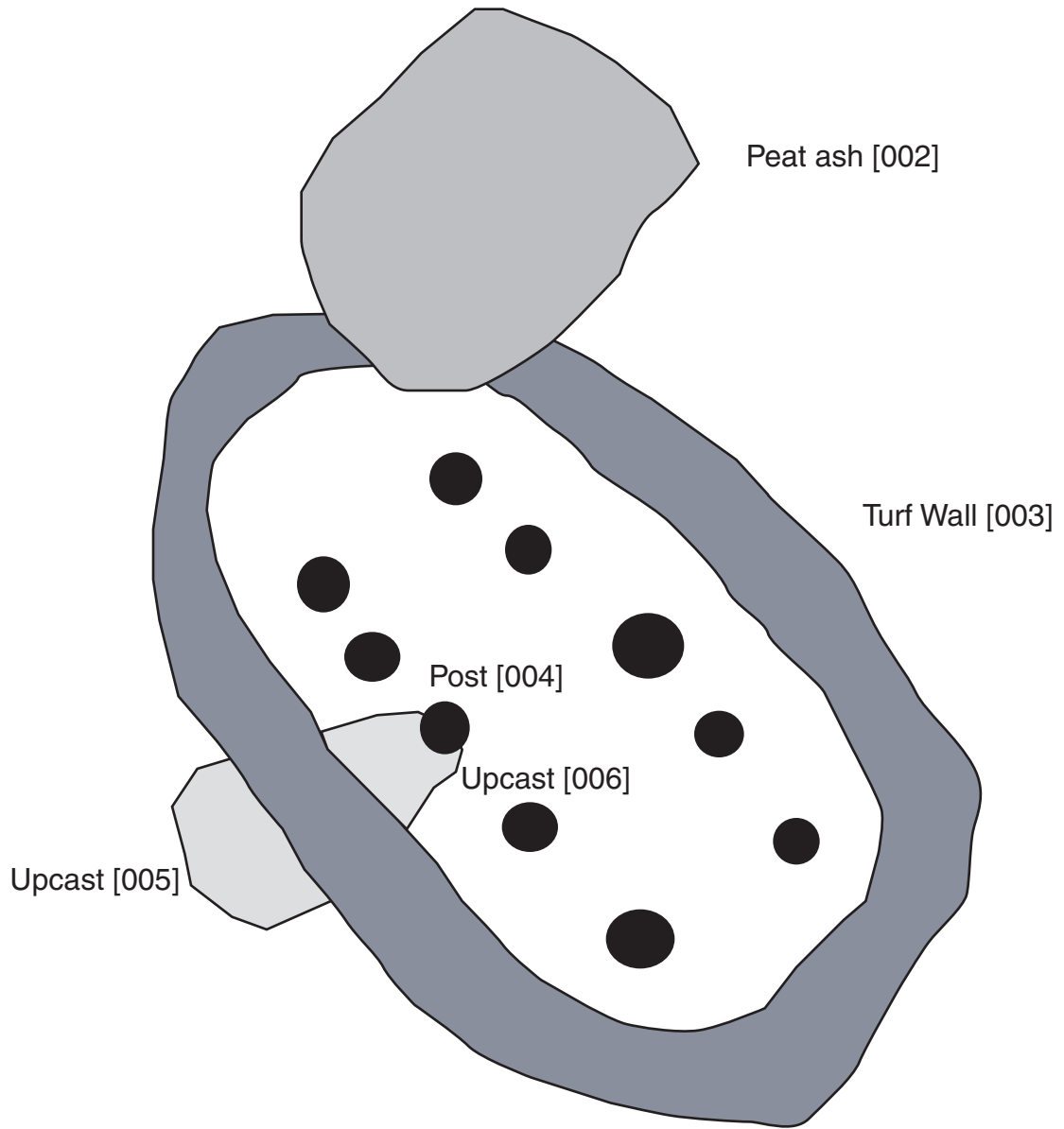
Equal to/same as

For example, if one layer lies above another, it is said to be later than it, while if it lies below, earlier. If two layers found in two separate trenches or excavation areas are later found to join up and therefore be the same, they are said to be equal to each other. The relationships between units are expressed in the form a diagram known as the Harris Matrix (after its creator) or Matrix for short.

In the diagram shown, the peat ash layer [002] is stratigraphically later than the wall [003] which in turn is later than the upcast [005].

Note that a physical relationship between any two units is not necessarily the same as a stratigraphic relationship; one unit may lie over two, but of those two, one is yet earlier than the other so the physical relationship cannot always be the same as the stratigraphic one. Thus in the illustrated example, a turf horizon (not shown but [001] in the matrix) may lie over all units, but because layer [002] lies over the wall [003], the physical relationship between the turf layer and wall is said to be stratigraphically redundant.

Conversely, two units may have no direct physical relationship but have a stratigraphic one by virtue of an intermediate unit which links the two. In the figure, the peatash layer [002] lies over the wall [003] which in turn lies over the upcast [005]. Thus although the upcast and the peat-ash layer are not physically touching, they still have a stratigraphic relationship in that the upcast is earlier than the peat-ash because the wall provides the connecting link.



Finally, two layers which do not appear to be physically connected at first may, upon removal of an overlying layer, be shown to be the same. Thus the two upcast layers [005] and [006] were originally given different numbers because they were not seen to be continuous. Only when the wall was removed were they revealed to be the same layer.

Note that the postholes and the wall have no direct stratigraphic relationship, but because they are presumed to be contemporary, they have been placed on the same level in the matrix.

2.3 The Recording Process

The recording process involves making drawings, writing descriptions and where necessary, taking photographs of what is being excavated. Because excavation proceeds through the identification of units, the recording process is done in the same way. The field record consists of two basic components; the **unit records** and the **registers**.

There are two types of unit – **basic units** and **group units**. Basic units are the smallest defined and excavated entities in the field (i.e. deposits and cuts; see section 2.2), while group units are sets of related units. For example, the walls, floor and postholes of a building can all be grouped together as a structural unit. Moreover, multiple levels of grouping are allowed. For example, a hearth may consist of several basic units – a cut, stones and ash layer, which would be grouped together. But then this hearth may be part of a building along with floors, walls and postholes, so another level of grouping is created. *Always consult with the supervisor about grouping units.*

Excavation areas, trenches and test pits are all assigned unit numbers too, as is the spoil from an excavation. Excavations are cuts and spoil is a deposit. It is important to recognize these as units because they are equally a part of the history of the site. Moreover, section drawings are often taken from trench faces and the section number will take its number from the trench number.

All units are recorded on a standard unit sheet which is an A3 sized, pre-printed sheet of drafting film. Details on how

to fill this sheet out are given in section 3.2. In addition to the pre-printed A3 sheet, there is also an A4 pre-printed card for more general discussion of groups of units. Details on this are given in section 3.3.

These unit records are cross-referenced on site through the use of a register in which each unit is listed and identified by a unique number in a sequence. Both groups and basic units are listed in the same register. It is crucial that each time a unit is recorded, the next free number on the register is taken out and all the columns on the register filled out. Unit numbers are usually written in square brackets.

In addition to the unit register, there are also registers for photographs, finds and samples and these should be filled out appropriately. See sections 3.4, 4.2 and 5.2 respectively. All registers can be found in the site file, except for the current photographic registers which are kept with the cameras.

2.4 Samples and Finds

Samples and finds are those parts of the unit which you retain for further analysis and form part of the archive along with the records. The remainder of the unit is classed as spoil and is discarded.

Finds are ANY object which you retrieve, including animal bone, stone and slag as well as artefacts and all are registered in the same index. These finds should be kept in the course of excavation, either in a bag or a tray and when the unit is finished, should be labelled and registered. This is described in more detail in section 4.

Samples are taken in order to retrieve finds which are too small to collect by hand – plant remains such as seeds or microscopic components which can only be seen with the aid of a microscope. Not every unit will need to be sampled but when it is, it should be labelled and registered. More information on sampling can be found in section 5.

3. THE FIELD RECORD

3.1 The Registers

The register is an index of the total field archive which is produced during excavation and taken away from the site. There are 4 major components of the field archive: **unit records**, **photographs**, **finds** and **samples**. For each of these there is a register which indexes each part of the archive with a unique number. Each unit sheet, photograph, find or sample should be given a number from the relevant register which identifies that component of the archive.

Every component of the archive should have its own unique number. Never try and create sub-groupings by attaching suffixes to the system – for example, labelling units as 007a and 007b. Similarly never try and merge by joining numbers together – for example, labelling units as 007/008. This procedure always creates problems in post-excavation and analysis. If you want to subdivide or merge, ALWAYS take out a new number. They are not in short supply.

NEVER USE LETTERS OR OTHER SUFFIXES. IF SOMETHING IS DIFFERENT ENOUGH TO MARK IT THUS, TAKE A NEW NUMBER FROM THE REGISTER.

NEVER JOIN TWO NUMBERS. IF YOU CANNOT DECIDE WHICH ELEMENT SOMETHING BELONGS TO, GIVE IT A NEW NUMBER.

3.2 The Unit Sheet

The record sheet is the primary field record of excavated units on site. It has two components, a **graphic** part and a **text** part:

The **graphic** part is for the drawing of the unit, usually a plan, for which it has been pre-gridded as a 5m square at a scale of 1:20. It can also be used for sections or other drawings.

The **text** section has a series of pre-set boxes which need to be filled out according to prompts or as free text.

These two components will be discussed in turn.

Please use a hard lead pencil for these sheets, ideally a 6H but no less than a 4H; anything else tends to rub off, especially in the wet. Harder leads also produce a cleaner, neater line, making the text and drawing easier to read.

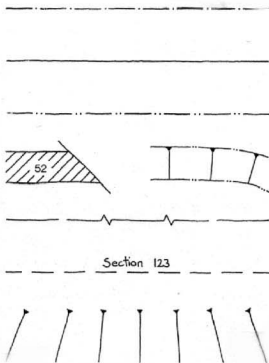
3.2.1 The Graphic Component

3.2.1.1 Plans

A plan is a measured view of a unit on the horizontal plane. Plans are of two types - either of single units or groups (multi-context). For single unit plans, only that unit should be drawn on the plan. Extraneous information such as the trench edge does not need to go on unless it actually forms one edge of the unit. Such extra information not only doubles the work but can confuse the plan.

The Plans are drawn by running metric tapes between grid pegs and taking measured offsets using another tape. A sufficient number of points around the edge of a unit or feature is taken to denote major changes in shape and the points are then joined up freehand.

Each plan must show the extent and surface of the unit and where edges are uncertain this must be clearly marked. Only major inclusions (e.g. large stones, finds) should be drawn. Finally, each plan should have at least one spot height taken, with more depending on its extent and degree of surface sloping. Spot heights of levels should be placed in the centre of even surfaces and at the edges of major changes/breaks in slope. The height should always be marked on the plan (approximate position is sufficient) using the bench symbol (?) under either the recorded height or a number indexed to a list of heights placed to the side of the plan.



Limit of excavation measured in relation to grid, not trench edge

Extent of context

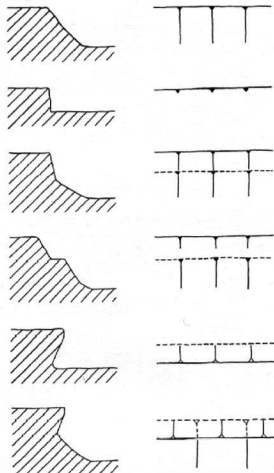
Edge of context cut away by later intrusion

Edge of layer 52 cut away obliquely

Limit uncertain within break in solid line

Line of section, labelled on side from which drawn

Hachure denoting extent of slope



Edge of cut feature

Vertical edge

Cut feature with conspicuous change of slope

Cut feature with stepped profile

Cut feature with undercut edge

Cut feature with undercut edge and return of slope

Plans are usually drawn at a scale of 1:20 except for skeletons which should be drawn at 1:10. When drawing plans, certain conventions are used to denote different aspects of the context which avoid the need for excessive annotation. Note that hachure length denotes length of slope, while steepness is marked by the spacing between hachures, the closer together, the steeper the slope.

At least two grid points should be marked on each plan, one of which should be the southwest corner; ideally, single unit plans should be drawn inside a 5m square aligned with the site grid. The southwest corner of this 5m square becomes the reference grid co-ordinate for the unit and if the unit extends into other grid squares, separate plans should be made for each 5m square. This use of consistent planning squares aligned with the grid facilitates overlays, allowing one to review the spatial relationship between contexts in a given 5m square once they have already been removed.

3.2.1.2 Sections, Profiles and Elevations

Sections, profiles and elevations are measured views of a unit or group of units on the vertical plane. **Sections** refer to cross-sections through a unit or series of units; **profiles** refer solely to the outline of a unit; **elevations** refer to the external vertical surface of an upstanding unit. Sections usually encompass many units but the section number will have the same number as the cut from which the section is drawn; in most cases this will be the number assigned to

the excavation trench. Profiles and elevations may either be a single unit or group drawings depending on how the subject is composed and has been identified.

Sections, profiles and elevations are drawn by setting up a horizontal string line across the length of the excavation edge or wall to be drawn. The string should be positioned about halfway up the face, stretched tight and levelled using a line-level; absolute heights should then be taken with a surveying instrument at one end of the string (or both if a long section). A metric tape is then fixed alongside the string and measurements taken along this, above and below the string with a hand tape or folded ruler.

Sections and elevations are usually drawn at a scale of 1:10 but can be at 1:5 or lower depending on the fineness of the stratigraphy. Clear and major boundaries should be marked by a bold, continuous line, less clear boundaries by a dotted line with context numbers in between the boundaries denoting the unit. All major inclusions (e.g. stones), artefacts and tephra layers should be marked on the drawing and fully annotated. Always put a minimum of 2 datum points on each section drawing – usually the two ends of the section line.

When drawing a section, always think about how it makes sense – do **not** just draw what you see. You have to interpret it. If something does not make sense annotate it accordingly.

3.2.2 The Written Record

3.2.2.1 Filling out the box sections

The standard unit sheet has a number of prompts for the description of units and the following information gives a guide as to how to follow these.

Site Code: the unique identifier for the site. Each site is identified by a unique code, usually an abbreviation of the site name followed by the year of excavation, e.g. HST 98.

Unit: the unit number taken from the unit register

Group: if a unit belongs to a larger entity, the number of this group should be written here. See section 3.3 for more details.

Type: the type of unit. There are only three types: deposits, cuts and groups.

Interpretation: This is free text but you should describe in a few words what you think the unit is. Minimally you should say what the unit is made of (e.g. peatash, turf) and how it came to be there (e.g. wall collapse, floor, dump).

Description: this section on the sheet comprises the basic description in which you must note the physical qualities of the unit such as its dimensions, form and material components. On the left hand side are a series of prompts for deposits; these provide guides to the categories of information required for each deposit unit. There are no

prompts for the other two types of unit, cuts or groups, but some guidelines are given in this manual along with explanations of the prompts in the next section.

Tephra: State the relationship of any tephra to the unit – i.e. below it, above it, or incorporated into it. Specify if possible what tephra it is. Also state whether it is in situ or disturbed.

Matrix: enter the number of the unit in the middle box and the numbers of any units immediately above and below as well as equal to it. Draw lines between the boxes to make the relationship clear.

Finds: Specify the different types of finds recovered from the deposit and write their finds numbers in the inset box. Under comments, write about their condition (e.g. fresh, abraded, burnt) and arrangement (e.g. random, clustered) in the unit.

Method of Excavation: Circle the appropriate term whether the unit was excavated by hand and/or by sieving. Also estimate how much of the unit was excavated (percent), and if sieved, through what mesh size and estimated volume (the standard bucket is c. 10 litres). If samples were taken, write the numbers in the inset box.

ID: Sign your initials here

Date: Write the date on which you completed the unit here.

Plan Matrix: If your unit plan covers more than one sheet you need to specify which sheet this is of a total (e.g. 1 of 2). Always mark the number of this plan in the centre square of the cross box on the left hand side and other numbers in respective adjacent squares. The three boxes in a column on the right hand side refer to the matrix for that 5m square; always put the number of this plan in the middle box and the plan of the last unit in that square above it, and the plan of the next, below it. Finally write the scale of the drawing in the insert box.

3.2.2.2 Recording Deposits

When describing the deposit, generally a lump of the soil matrix is taken in the hand for a number of ‘tests’ which aid description.

1. Compaction: this describes the strength or hardness of the deposit; most deposits encountered in Iceland will be fairly fine-grained and an approximate scale can be used when a lump is squeezed in the hand:

Firm	<i>resistant to pressure</i>
Soft	<i>easily squeezed but holds together</i>
Friable	<i>easily squeezed and crumbles</i>

These can be qualified by the use of terms such as ‘very’ or ‘slightly’.

2. Colour: this describes the main colour of the deposit and usually consists of two parts: the principal colour (e.g.

grey-brown) and a tonal qualifier (e.g. pale, mid or dark). In some cases, a Munsell Chart may be preferred.

3. Composition: this describes the approximate size of the particles in a soil; generally soils have been categorised into three broad divisions depending on the size of constituent particles:

Clay *very fine, characterised by strength, stickiness and plasticity*

Silt *moderately fine, characterised by a silky feel*

Sand *fine to coarse, characterised by a gritty feel and loose texture*

Most deposits are however usually a combination of these constituent sizes, e.g. silty clay or sandy silt and generally the main constituent is denoted by the latter and the lesser by the former. A flow chart can aid this process.

Approximate ratios (expressed as percentages) may be used also, e.g. silt (70%), sand (30%). Occasionally a deposit may be composed primarily of stones and these can be graded by size also:

Gravel *fine stones, 2-20mm in size*

Pebbles *medium-sized stones, 20-60mm in size*

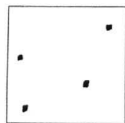
Cobbles *coarse stones, over 60mm*

4. Inclusions: this describes the presence and character of any other constituents of a deposit (except finds), most commonly stones, but also elements like charcoal or perhaps fragments of turf and tephra. Any inclusions are usually noted in terms of their frequency, size and shape:

Frequency	<i>expressed as occasional, moderate or frequent</i>
Size	<i>estimated size in cm or mm</i>
Shape	<i>described as angular or rounded</i>

As with all descriptions these may be qualified by terms such as ‘very’ or ‘slightly’. Frequency may also be expressed in percentage terms, but note that anything over 40% should no longer constitute an inclusion but be described in the main composition. For example, a deposit with an estimated 60% medium-sized stones in a sandy silt matrix should be described as sandy silt pebbles. In such cases, or where the inclusions are at least very frequent, the degree of sorting may also be significant; this means the degree to which the inclusions are of a similar size - pebbles of varying size are said to be poorly sorted while pebbles of a similar size are said to be well-sorted. Visual aid charts can help with estimates of both frequency and sorting.

5. Thickness/Extent: this describes the dimensions of the deposit, that is the area it covers and its thickness.



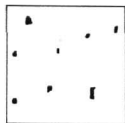
1%



15%



40%



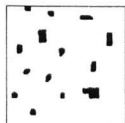
2%



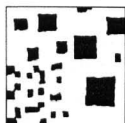
20%



50%



5%



25%



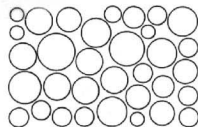
70%



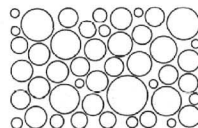
10%



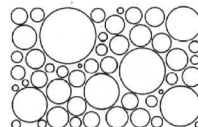
35%



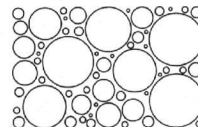
Well sorted



Moderately sorted



Poorly sorted



Very poorly sorted

6. Boundary: this describes how clear or sharp the edges were or the boundary with the next/adjacent deposit or how abruptly the change is between them.

Sharp *the edge is very distinct and the change occurs over a distance of <10mm*

Gradual *the edge is more diffuse and the change occurs over a distance of 10-50mm*

Unclear *the edge is not clear and the change occurs over a distance of >50mm*

7. Homogeneity: this describes how homogeneous the deposit is; for example is there any internal layering or lensing or does the deposit look the same throughout?

Uniform *the deposit is similar all over*

Mottled *the deposit is variable but evenly so all over and composed of different patches of material. The mottling may be fine (<5mm) or coarse (>5mm)*

Lensed *the deposit has internal small layers (lenses), or discrete pockets/patches of other material*

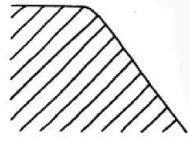
8. Disturbance: this describes whether the deposit has been disturbed in any way, either by human action or natural processes. The most common include:

Truncated	<i>part of the deposit has been cut away by a later feature</i>
Burnt	<i>the deposit has been burnt in situ; not to be confused with a deposit containing burnt material</i>
Bioturbated	<i>disturbance caused by worms, animal burrows or roots. Specify</i>
Iron Panned	<i>crusts of hardened yellow-red soil, usually forming at the interface between deposits and in waterlogged conditions</i>
Gleyed	<i>fine grey and brown mottling with small dark bluish-black nodules – usually formed under waterlogged conditions</i>
Frost Cracked	<i>small-scale distortion or fissuring caused by freeze-thaw action</i>

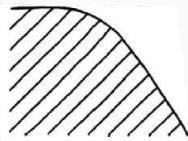
3.2.2.3 Recording Cuts

Unlike deposits, the cut has no solid matter to describe but is rather a description of form or shape.

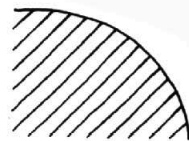
- 1. Shape in plan:** this describes the shape at the top of the cut; for example the top edge of a pit may be oval or circular when viewed from above.
- 2. Corners:** unless the shape in plan is very rounded, the angularity of the corners should be noted.
- 3. Dimensions:** the size of the cut in order of length, width/breadth and depth although as a precaution the dimension measured should be affixed, e.g. L2.4m, W0.56m, D0.23m.
- 4. Sides:** describes the shape and steepness of the sides, for example straight, concave or stepped and vertical, steep or gently sloping. Estimated gradients or angles of slope may be added if necessary, e.g. 1:2 or 45°.
- 5. Base:** describe the base of the cut, whether it is flat or concave or tapered for example.
- 6. Break of slope:** how sharply the top and bottom edges change direction from the level at which the cut starts and stops? It can range from sharp through gradual to imperceptible.
- 7. Orientation:** if the cut is elongated, what is the orientation of its long axis?, e.g. E-W.
- 8. Inclination:** is the angle of the cut as it goes into the ground tilted from the vertical and if so by how much? - this may chiefly apply to postholes or stakeholes.



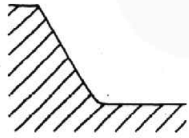
Sharp



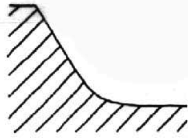
Gradual



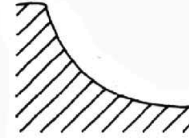
Not perceptible



Sharp



Gradual



Not perceptible



A tapered point



A tapered blunt point



A tapered rounded point



Vertical sides and
a flat base

3.3 The Group Sheet

The Group sheet is an extra sheet for longer discussion of a group of related units. The basic unit sheet can be used for this purpose, especially if drawing a multi-context plan or a section, but sometimes more text space is required for discussion especially as these are broader site entities. On multi-unit or group plans and sections, always label each unit clearly.

3.3.1 Filling out the Group Sheet

The purpose of the sheet is to provide extra text space for discussion of groups and is deliberately open with minimal prompts to allow free text. Nevertheless some guidelines are given below.

Site Code : see the unit sheet

Unit: the unit is where the number of the group is written.

Area/Trench: the number of the excavation trench.

Phase: a preliminary dating of the group, designated by a century or period.

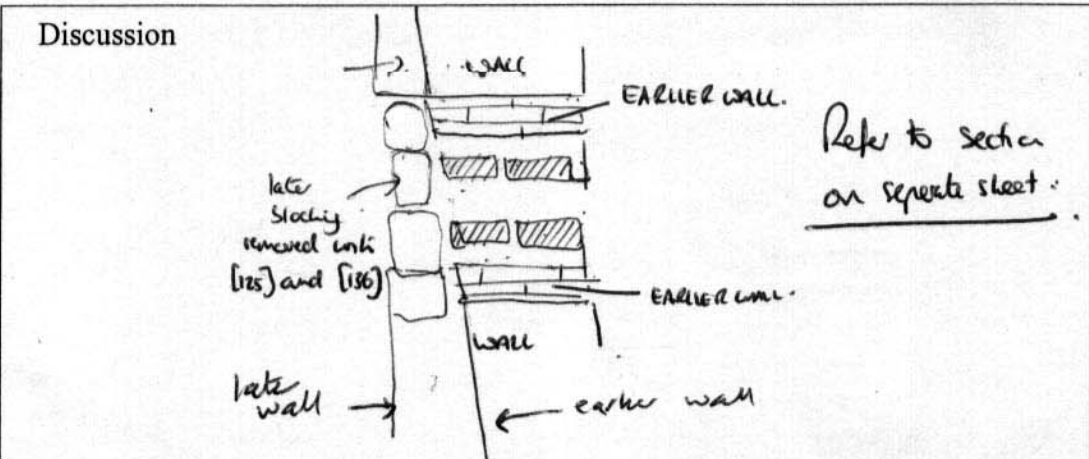
Brief Description: a few words or short sentence on what the group is (e.g. a structure, a grave).



Site Code	SKM02	Unit	[153]
Area/Trench	1.	Phase	

Brief Description Blocked in fireplace.

Elements (i.e. Units) [125]. - Dump of ashy peat ash, + charcoal lenses:
 [136] - charcoal rich soil, poss wall/chimney collapse
 [143] - Dump/fill within original fireplace.



Sign & Date
 AFH
 18/6/02

Abandonment:
 dump of mixed charcoal rich soil with lots of burnt stone and small cobbles with and just covering main fireplace hearth [143]. It appears the walls/chimney then collapsed in over this, probably from both sides ([136]). A dump of ash and charcoal probably indicates later use.
 Large stones. (All drawn on various plans) may have formed a blocking wall; which sat flush with the School house N-S wall. So the fact in the later phase, fireplace was blocked off. This is demonstrated by relationship of [125 and 136]. going under leveling within school house [149]. The earlier floor is probably contemporary with fireplace and walls.

Elements: here is where you list all the units which belong to this group.

Discussion: this is the main part of the sheet where free discussion of the group is written. The column on the right entitled 'Sign & Date' is used to show that the group sheet is expected to be continually updated or changed. The kind of text written here should include any physical characteristics of the group (e.g. dimensions, material, form) and also more interpretive discussion such as how the entity was formed, how it functioned in the context of the site and how it was abandoned.

3.3.4 Special Sheets

Apart from the standard unit and group sheets, there are a number of special unit sheets which might want to be used sometimes. These include two main special types of deposits which require information that the standard sheets does not cover: structures and skeletons.

3.3.4.1 Recording Structures

Until the 19th/20th century, all buildings were constructed in turf or turf and stone, with timber supports and internal timber furnishing. Excavating and recording turf structures require some special notes.

Like masonry or brickwork, turf walls are composed of individual elements (turfs) but attention must be directed to any major variations (e.g. foundations, rebuilds or blockings) which might be distinguished by a different type of element or coursing and recorded as a separate structural unit. The construction of the wall with these elements can involve a simple coursing of just one type (turf or stone) or a composite coursing of multiple types (different types of turf block or turf and stone). Sometimes, foundation cuts are present but they are rarely deep (c. 0.2m). More commonly, the whole interior area of a structure is stepped down and the walls are set along and inside the edges of this cut. Such cuts should be recorded separately.

The basic construction of a turf wall involves one or more of three elements: turf blocks, stones and soil which are described in more detail below.

Turf

Turf can be cut from anywhere but the best turfs are often cut from wet areas (e.g. sledge marsh), which are often distinguished by a higher iron content and oxidation manifest as a redder hue. There are 4 main types of turf block:

strengur: strips 0.9-1.2m long, 0.25-0.30m wide and upto 150mm thick. This was the best and most commonly used type, especially in domestic structures either on its own or with stone.

snidda: diamond-shaped in plan, 0.3-0.4m long sides and 100-200mm thick. Used in roofs and outer walls, often with stone.

kvía: block or brick-shaped, 0.6m long, 0.3m wide and 0.3m thick. Used commonly in livestock pens. This was laid alternately lengthwise and crosswise.

klambra: long block which has had its length diagonally cut and a right or left slant. Used chiefly in walls of domestic structures to create the herringbone coursing, especially with strip turfs and laid crosswise.

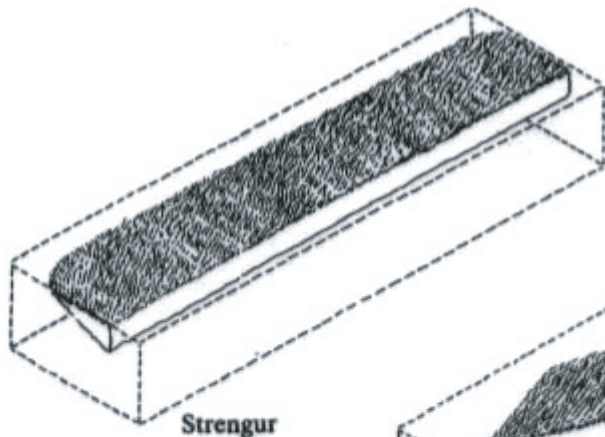
Roof turf usually consisted of sheet turf (torf), heavy sheets 1-2m long, 0.5-0.6m wide and 50-60mm thick, thinning out at one edge.

Stone

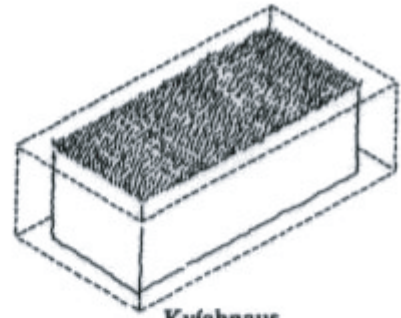
Stone is often used with turf but usually only as foundation coursing. If stone forms the main material of the wall, it will usually just be as a facing with a thick soil core behind. More substantial stone built structures with stone as the only component only occur in modern buildings.

The main stone type used in structures is **Basalt** (*basalt*) which is either dark grey/black with a microcrystalline structure (blackstone/*blágrýti*) or paler grey with a fine crystalline structure (greystone/*grágrýti*). The stone can sometimes also be very vesicular (lavastone/*hraungrýti*).

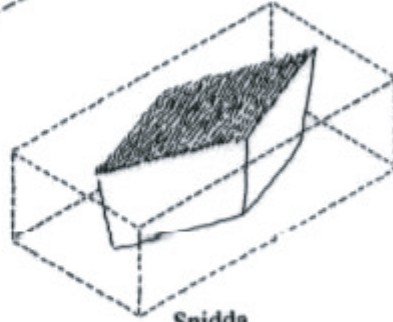
When recording structural stone, it is important to note whether it has been worked or not, i.e. had any part of its surface modified. This either involves dressing (i.e. smoothing off one or more faces) or moulding (i.e. elaborate shaping). Such worked stones may be kept if considered significant, and if so, they should be numbered and annotated on the plan. The method of coursing should also be noted, e.g. random, regular.



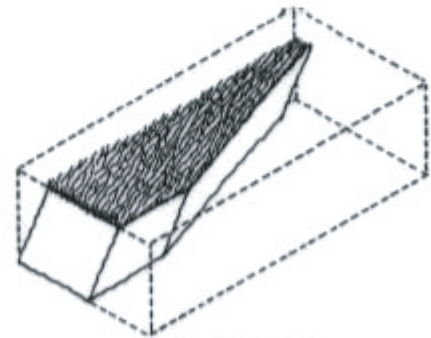
Strengur



Kviahnaus

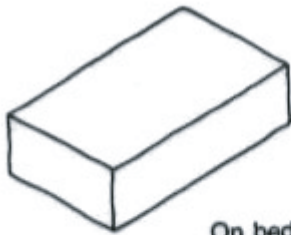


Snidda

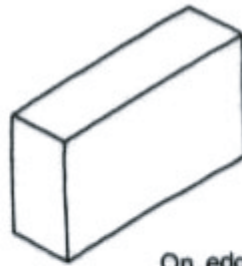


Klömbruhnaus

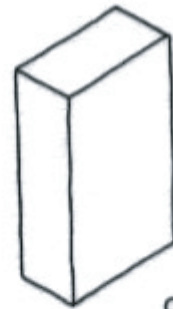
Orientation



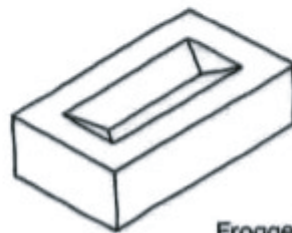
On bed



On edge



On end



Frogged brick

Soil

This is usually just mixed soil and turf and is always used in combination with stone and turf, never on its own. It can be used in two main ways:

A **filler/leveller** between the stone and/or turf elements

A **core**, providing the main bulk of a wall with the turf and/or stone elements just acting as a facing.

Bricks

Brickwork will only be encountered on very recent sites but it is still worth special commentary. Bricks may sometimes be used as ad hoc elements in a turf or stone structure but they are most likely to occur as part of a brick built structure. A sample of each brick type should be kept as well as mortar used.

3.4.4.2 Recording Skeletons

Skeletons – whether human or animal – are a special kind of deposit and should be recorded separately from the grave cut and backfill. Skeletons should be drawn at 1:10 and when photographed, it can be useful to place two fixed points around the skeleton (e.g. white-painted nails) which should also be marked on the plan. In this way, photos can be overlaid on plans.

When lifting skeletons, it is important to bag the different body parts separately, especially left from right and mark the bags accordingly. Hands and feet should also be bagged with the soil around them as small bones are often missed. Vertebrae and ribs should if possible be kept in their order as well. All these procedures greatly help with reconstructing the skeleton back in the laboratory.

When recording skeletons, a special sheet should be used or the following guidelines which explain the prompts on the sheet.

1. Body: the general position of the body, i.e. whether lying on its back or side (right or left), whether extended, crouched or contracted.

2. Head: the position of the head, i.e. whether it is facing up or to the side (right or left), etc..

3. Right arm, location of right hand: the position of the right arm, i.e. extended or contracted, and the position of the hand, e.g. crossed, facing out, etc..

4. Left arm, location of left hand: the position of the left arm, i.e. extended or contracted, and the position of the hand, e.g. crossed, facing out, etc..

5. Right leg: the position of the right leg, extended or contracted, etc..

6. Left leg: the position of the left leg, extended or contracted, etc..



SKELETAL RECORDING SHEET

Site Code H1ST01	Farm Code	Context JK 15
Area Z	Grid Square(s) 169/386	Context Type SKELETON
Grave cut 1657	Coffin	Fill/s 1656

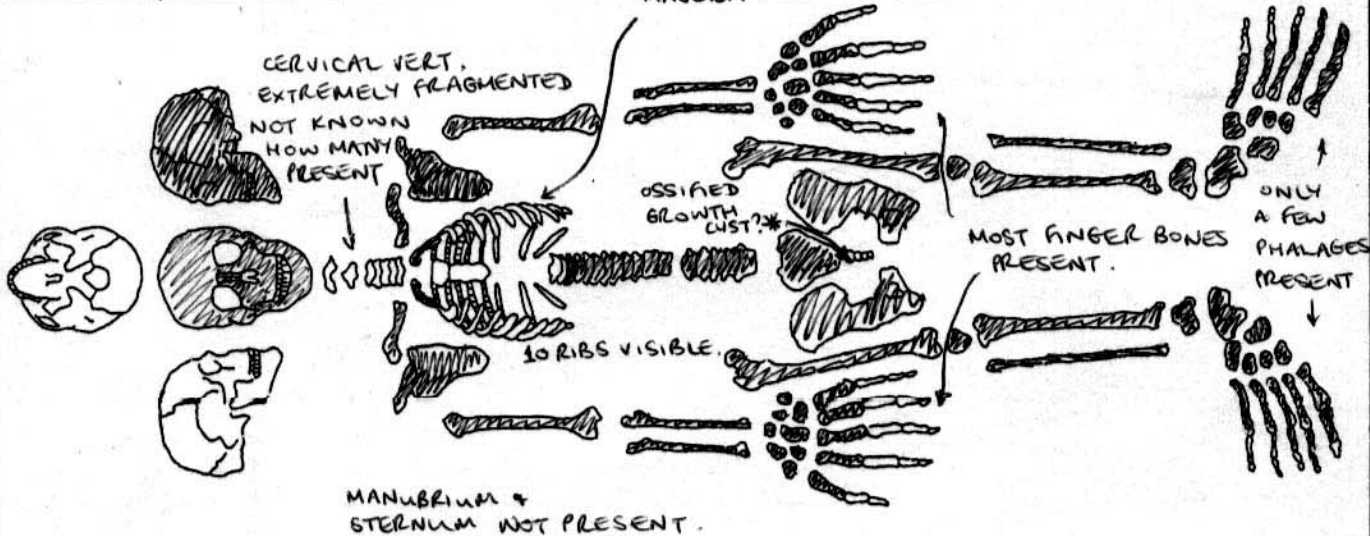
ATTITUDE OF:

1. Body
 2. Head
 3. Right arm, location of right hand
 4. Left arm, location of left hand
 5. Right leg
 6. Left leg
 7. Feet
-
8. Extent of in situ bone degeneration
 9. State of bone after lifting
 10. Other comments

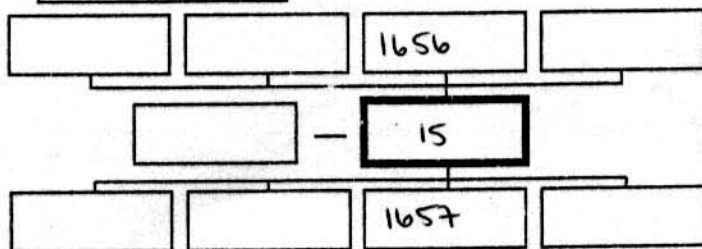
1/ extended supine, adult inhumation
 2/ head on right side facing south
 3/ humerus is out of alignment with scapula, has slipped to underneath clavicle; radius & ulna lying across pelvis, hand has been disturbed but across the top of femur (left)
 4/ humerus along side torso; radius & ulna across the top of the sacrum and on top of right radius & ulna; hand across top of right femur (possibly clenched)
 5/ leg extended & straight - tibia twisted outward
 6/ femur twisted inward (on medial side), tibia & fibula straight P.T.O. →

Shade bones present and mark extent of truncation

MAJORITY OF RIB PRESENT GREATLY FRAGMENTED.



Stratigraphic Matrix



Coffin? Yes / No (Please underline)

Head is at W end of grave

Plan overleaf (if none explain below)

Levels overleaf. (Tick when transferred)

Highest..... Lowest.....

Drawing No's 147	Photo No's Vertical photo <input type="checkbox"/>	Sample No's 334 335 336
---------------------	---	----------------------------------

FINDS (Please underline) None Pot Bone Metal Wood Leather Other (Please describe)

FINDS

DISARTICULATED HUMAN BONE

Exc. by & date VE 10/8/01	Rec. by & date VE 10/8/01	Checked by & date	Data entry by & date
------------------------------	------------------------------	-------------------	----------------------

7. Feet: the position of the feet, e.g. crossed, facing out, etc..

8. Extent of in situ bone degeneration: i.e. well-preserved, poorly preserved etc..

9. State of bone after lifting: i.e. Stable, fragile etc..

10. Other Comments: other notes not covered in the prompts, such as any discoloration of the bone, associated grave goods etc..

The exploded diagram of the skeleton in the box is there so that each anatomical element as it is identified can be coloured in to show its presence.

Coffin: tick yes or no whether the skeleton was associated with a coffin

Head: mark in orientation of skeleton by giving cardinal direction of head, e.g. west (W)

Plan overleaf: tick if a sketch plan is included on the reverse of the sheet

Levels overleaf: tick and note the highest and lowest levels taken on the skeleton

The remaining portion of the sheet is as for deposits.

3.4 Photography

Photographs are a much more strategic record of a site. One may decide to photograph every unit, especially if using a digital camera, but even though it may be easy and cheap, it is usually very hard to ‘capture’ the unit in an informative manner. Rather photography should be more considerately used, according to the strengths of the media and the subject matter - such as large areas, working shots or special features.

Three types of photographic image are employed:

Digital – use this as much as possible, as such pictures are cheap, instant and disposable. Digital images are good as record shots and for web-based or other digital presentation as well grey reports. They are not generally suitable for publication however (yet).

Conventional black & white – use this for publication images. Much more time and care should be devoted to preparing for these kinds of shots.

Conventional colour slide – this too can be used for publication but also presentation. However, with increasing use of digital projectors, their presentation function is made redundant by digital cameras.

When taking photographs, make sure each shot is logged in the register; there is always one sheet per film. The register should be kept with the cameras in a special, hard case. For conventional cameras, each time a film is finished, the

completed register should be placed in the site file and a new form placed with the camera. ALWAYS replace the finished film in a camera and register with a new one. Do not leave this for the next person as they may not realise the camera is empty. When putting in a new film, ALWAYS check that the ASA setting on the camera corresponds with the film. The first frame of any film should be an identity or ID shot – a picture taken of a board which has the film number and site code written on it.

Preparation of an area for photography, especially for images intended for publication or presentation requires some time and thought. Conventionally this may require the area to be clean, tools and loose soil removed and people kept out of site. Also scales and boards with the identification of the subject matter are usually included. However, photography is a much more versatile medium and it can be used in any number of ways which do not necessarily have to mimic the graphic record in this manner. Ultimately photographs should show what you want them to show and the ‘scene’ should be prepared accordingly.

4. FINDS

4.1 Retrieval

Finds are not always very common on sites in Iceland but all finds must be kept - it is always better to throw away later than regret not having retained something. What constitutes a find? All artefacts (pottery, metal, etc.) and organic material (bone, shells, charcoal etc.) must be kept. Fragments of stone are not usually collected unless they are obviously artefacts or worked (e.g. whetstones); otherwise in the case of unworked stones, it may be useful to count and weigh these on site before discard, especially if they are burnt or fire-cracked, and note this on the unit sheet. Structural or building elements (stone, brick or tile) do not normally need to be kept except for samples of the different types.

Many finds are often too small to be seen during the normal process of excavation and are therefore best recovered through sieving/screening of all soil which is removed from a context. Sometimes very small fragments occur and it may be impossible to retrieve them (such as tiny charcoal fragments), but if these are numerous and considered important, a sample of the soil matrix should be taken so they can be processed later (see section 5). The table shows different retrieval methods according to the deposit and is only intended as a guide.

Retrieval Method

Type of Deposit	<i>Hand</i>	<i>Sieving/Screening</i>	<i>Bulk Sample</i>
Floor/Occupation	x	x	x
Wall	x		
Midden	x	x	x
Turf debris	x		
Hearth	x	x	x
Grave fill	x	x	
Natural	x		
Industrial	x	x	x

Table showing finds retrieval methods for different types of deposit

4.2 Recording

All finds should be registered at the end of excavating a unit or a day. Each find or group of finds will be given a unique number from the register. Finds come in three types:

Unique – these include single objects such as a bone pin or a coin or even a pottery vessel.

Bulk – these include multiple objects, usually fragments such as animal bone, glass or pottery sherds.

Sampled – these include objects which have been kept of which many more occurred but were not retained. Sampled objects usually consist of building material such as bricks, mortar or concrete.

Bulk finds should be first sorted out into different types – e.g. pottery, glass, clay pipe, iron and then separately registered.

All finds should be bagged and properly labelled. Strong, plastic bags should be used with write-on labels. All information must rather be written on the bag with a permanent marker pen and if necessary, also on a waterproof label (e.g. Tyvek) or aluminium tag placed inside the bag.

Information on the label should ALWAYS include three things:

Site code – e.g. HST98

Unit Number – e.g. U-009

Finds number – e.g. F-009

Additionally, you might include area/trench, finds type and the date, but this information is redundant and should be on the register.

To avoid confusion between numbering systems, the unit number should ALWAYS be prefixed with a U or Unit and the finds number with an F or Find. Alternatively you could use square brackets around the unit number (e.g. [009]) and arrow brackets or triangle around the finds number (e.g. <009>) but unless these are clear, they may cause confusion. This information should be written on the bag at the time of retrieval, not when the unit is completed as finds bags can often become mixed or moved.

In some cases, finds might be 3-dimensionally recorded (x/y coordinates from the grid and a level taken); this is particularly useful for finds on floor or old land surfaces which may be in a primary context. Co-ordinate information should go on the register and if desired, on the label with the find.

4.3 On-site Conservation

Different materials require different care once they have been removed from the soil; remember that if the objects have remained in the soil for so long, they have probably stabilised and therefore it is best to always try and keep any finds in as similar environment as that in which they were found. Thus finds from wet or damp conditions should be kept moist and prevented from drying out. This applies to most items such as metal, glass, organics (e.g. wood, leather), however some materials are hardier than others and therefore may be more robust such as stone and pottery.

When bagging bulk finds, it is important to separate out different types not only for the register but also because those which are more fragile (e.g. charcoal, bone, metal, glass) may degrade further when kept with other objects.

5. SAMPLING

Not every unit needs to be sampled, and you may need to consult with a specialist about whether to sample or not. Sampling is conducted in order to retrieve finds or other information about a deposit which are usually too small to be obtained by conventional, hand retrieval methods.

5.1 Types of Samples

There are two main methods of sampling: **bulk** sampling or **block** sampling. Bulk sampling involves the collection of a loose collection of soil from the unit while block sampling involves cutting a solid, intact section of the unit.

Bulk samples should be taken in a standard volume - 10-15 litres (i.e. 1 bucket) is usually sufficient. Samples should be placed in strong, air-tight buckets. The sample should be taken from near the centre of the deposit to avoid contamination from adjacent deposits.

Block samples are taken using special monolith or kubiena tins which are carefully inserted into the soil face; the soil around them and as far behind as possible is then carefully cleaned away until the tin can be levered out with the block of soil intact within the tin. This should then be tightly wrapped in a finds bag with parcel or duct tape and marked showing which face is front and back and which is top and bottom. Ideally, the section from which the block was taken should be drawn and photographed.

Each method is used for different reasons and when sampling, both the method and purpose should be considered. The main value of sampling for small remains is that it provides supplementary information on diverse things such as diet, the surrounding vegetation and environment, and what activities may have been associated with the deposit through micro-refuse.

Generally, most organic remains except bone will only survive either in very wet conditions or if they have been charred. If a deposit is not waterlogged, the best guide to whether it will offer potential for sampling is if there is an appreciable quantity of charcoal or ash inclusions. Bone will survive in most conditions except the most acidic while mollusc/shell prefers more alkaline environments. The major reasons for sampling are given in the table which shows what information is being sought, why, and using what method.

Objects	Information	Method
Plant Macros (e.g. seeds, stones, stems)	diet, vegetation	bulk
Pollen	vegetation	block
Invertebrates (e.g. molluscs, insects)	environment	bulk
Other fines (e.g. coprolites)	activity	block
Soil chemistry (e.g. phosphates)	activity	bulk
Micromorphology (i.e. soil structure)	activity, taphonomy	block
Small artefacts	activity	bulk, block

Table showing reasons and methods for taking soil samples

5.2 Recording

All samples should be labelled clearly with a unique sample number taken from the register in the site file. For bulk samples, an aluminium tag or waterproof label should also be placed inside the container as a back-up, as external labels on samples often weather off. Use only ONE number from the register – do not give each bucket or bag a different sample number if they are part of the same sample.

Information on the label should ALWAYS include four things:

Site code – e.g. HST98

Unit Number – e.g. U-009

Sample number – e.g. S-009

Number of containers - e.g. 1 of 2

To avoid confusion between numbering systems, the unit number should ALWAYS be prefixed with a U or Unit and the sample number with an S or Sample. Alternatively you could use square brackets around the unit number (e.g. [009]) and a diamond around the sample number but unless these are clear, they may cause confusion.