



Site Manual

Compiled by Mike Emery

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Foreword

This is the third edition of the recording system first outlined in the Poulton Project Field Manual of 1995 [Emery & Gibbins, 1995]. The recording system adopted by any site can only be as accurate and useful as the person using it. It is widely acknowledged that different excavators will record similar features in different ways; exact comparisons between the recording of features then, cannot – and should not – be expected, particularly within a long-running research excavation. The variety of backgrounds and experience, both archaeological and non-archaeological, that different members of the excavation team bring to a project will affect the manner in which recording is carried out. However, the purpose of a site field manual is to provide a benchmark and framework for the recording process. The adoption of a specific set of standards and conventions within the recording system provides an aid, not only to excavators on-site, but also to the post-excavation analysis process and the function of the project as a whole. This approach is intended to be ‘user-friendly’ for the excavation team, but also for outside researchers approaching the recorded material.

It must be realised by the entire excavation team that there will be different demands upon this Field Manual made by the different excavators on the site: students will use this manual to learn from, volunteers and new excavators to familiarise themselves with the Poulton system, and experienced Poulton excavators as a reference tool. Consequently, adopting the right ‘tone’ for this manual has been somewhat difficult: what may be brand-new information for some people will be old news for others. A number of features within the manual are intended to provide additional help and cross this divide.

This manual can never be a complete guide to “How to Dig a Site”. What it can be, however, is a reference manual and guide to the way in which the site is recorded. Students and others who find that they need specific tutelage in particular methods or field practices should consult a member of the Project staff who will be more than happy to help.

Mike Emery, May 2005

1. Health and Safety

The health and safety of everyone working at the Poulton site is paramount. Although the Site Supervisor is responsible for undertaking any required risk assessments and making specific safety related regulations, ultimately, **you** are responsible for your own health and safety and that of those working around you. As always in archaeology, occasionally stop, look around you, consider the consequences of your activities and if in doubt, **ask**.

The following are a basic but non-exhaustive, set of guidelines:

1. An excavation is a potentially dangerous area. All hazards on site should be marked clearly. Deep holes should be marked and, wherever possible, access to them prevented. Holes over 1.2m deep must be shored or battered; where a fall of more than 2m is possible, a physical barrier must be erected.
2. Avoid walking near the edges of trenches or sections.
3. Avoid running on site.
4. A cubic metre of soil weighs a tonne. The location of spoil heaps should be well away from the edges of trenches or holes and a clear gap maintained between the spoil and any excavations. Spoil should be tipped on the side of the heap away from the edge of the excavation.
5. Hard hats must be worn at all times when working below 1.2m and/or with machinery
6. Tools, equipment and other portable objects must not be left on the edge of a deep hole. When not in use tools must be laid in such a way so as not to cause injury if they are stepped on.
7. Wear adequate footwear. The definition of adequate will depend on the type of site and work, but loose or open shoes, or shoes with substantial heels are not acceptable. Stout footwear must be worn on any construction site.
8. Everyone should be immunised against tetanus.
9. No one shall be allowed on site under the influence of alcohol or any drugs whether prescribed or not which may affect their coordination or reasoning abilities. In such cases you may be asked to leave and, in the case of unprescribed drugs or alcohol, you may not be allowed to return.
10. Horseplay of any description is dangerous. It is the duty of the Site Supervisor to prevent dangerous activities and stop horseplay on site.
11. Site safety is largely a question of common sense. The Health and Safety at Work Act (1974) places a duty on everyone to take reasonable care whilst working to ensure that they do not endanger themselves or anyone else who may be affected by their activities.
12. No smoking is allowed on site or in site accommodation where records or finds are housed
13. The Care of Substances Hazardous to Health (CoSHH) legislation requires special attention to be paid to the identification, use and storage of any potentially dangerous chemicals. Where these are used on site, they must be clearly labelled and a manual detailing emergency procedures made available for the use of all employees.
14. In the event of a fire, bomb scare or similar emergency, the site must be vacated promptly. The appropriate emergency services should be called and the Site Supervisor informed about the situation. An agreed meeting-point at a safe distance from the site should be arranged at the start of the fieldwork for assembling during such emergencies.

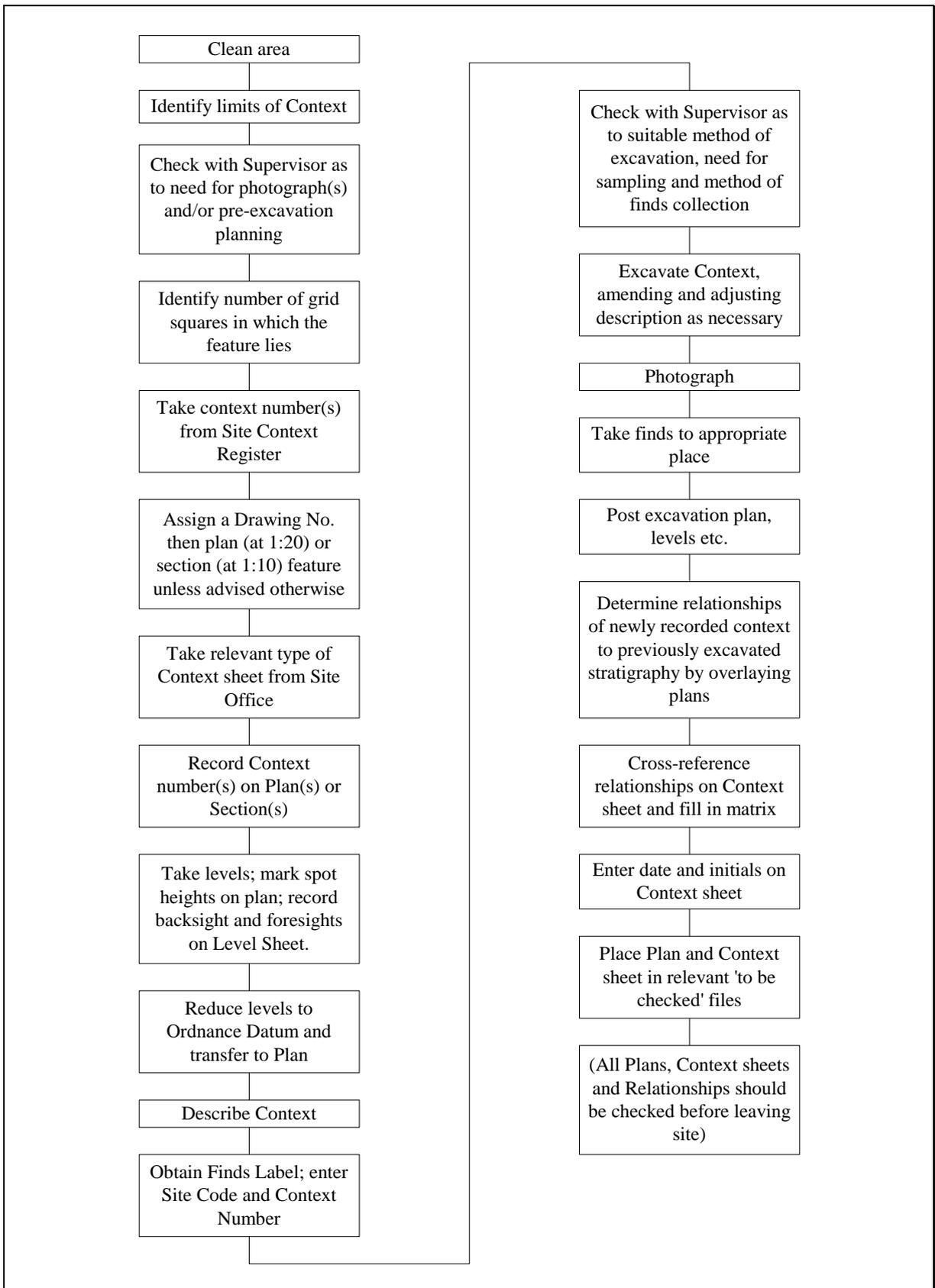
Apart from these regulations, there are some other health and safety precautions that anyone working on site should observe:

1. During hot, sunny weather, **do not underestimate** the threat from sunburn and dehydration. There have been several cases in the past of excavators suffering agonisingly extreme sunburn. Use sun-blocks and sun-creams; wear a hat; drink plenty of water.
2. Take particular care when the site is wet. The site is especially vulnerable to damage when it is wet and the soil and stones become extra slippery.
3. Take care when lifting and moving wheelbarrows. They can be heavier than expected, particularly if the soil in them is wet. Don't try and show off by lifting a barrow that is far too heavy for you: falling barrows and spoil can cause injury to yourself and others.

4. Remember that you are responsible not only for your own safety, but also for the safety of those you are working alongside. Watch where you are placing tools and equipment. Warn people around you if you are swinging a mattock around, stringing tapes across the site, or doing anything, which might potentially injure someone.
5. Please keep your hands clean, particularly when around food or the mess tents. The fields in which the trenches are located are used as pasture land by cows. Cows can carry the E. Colli bacterium, which can get to people via dirty hands or through chewing grass stems from a pasture field.
6. Please inform the staff if you have any particular medical conditions of which they should be aware: asthma, diabetes, etc. If you are a volunteer, please note this information when you fill in the Volunteer Form.

2. Steps in Archaeological Excavation

The fundamental steps in archaeological excavation are outlined in the following chart.



Excavation is a destructive process. It is vital that it is carried out and recorded correctly. If you are unsure, record it. Superfluous or unnecessary information can be ignored; that not recorded at the time can be lost forever.

The Context Record sheets form the primary written record of an excavation. It is essential that they be filled in correctly, with the maximum possible amount of information, at the time of excavation. Remember: the excavator has the first-hand knowledge of a context, and a person reading the sheet at a later date will probably not have that benefit, so the record must be as clear as possible. Be **objective** and be **accurate**.

Recording at Poulton is done on site-specific sheets with different sheets for different types of contexts, namely:

- Fill and Layer
- Cut
- Structure
- Skeleton
- Cremation

The remainder of this manual will primarily deal with the commonest two records, fill/layer, and cut. The structure record is rarely used and the supervisor's guidance sought if you need to use this record. The skeleton and cremation records are fully detailed in the separate Skeleton Manual [R. Carpenter, Ed, 2013]: copies of which are freely available from the Site Office.

3. The Fill/Layer Context Sheet

This is probably the commonest record used at Poulton and every excavator should know how to fill in the primary data. It is important that the data is recorded at the same time as the excavation. Memory can play strange tricks. Figure 1 below shows the primary data recording section and following on are some notes on how to complete each item.

Poulton <i>Research Project</i>		Context Record – Fill/Layer	
Co-ordinates: 500E/410N	Site Code: POU/CHF/ 05	TRENCH NO: XVI	Context No: 16050
Length: ✓	Width: 38cms	Diameter: ✓	Thickness (max/min): 10cm-4cms
Colour (Visual): Dark Red-Brown	Texture (e.g. silty-clay): Sandy Clay	Consistency (e.g. soft/firm/plastic): Firm	
Coarse components (% and approx. size in mm.):			
Description: 1. Extent 30%			
2. Relationship to other features Cut by Post-hole (16060)			
3. Distribution of other components/finds Random			
4. Waterlogging No			
5. Preservation of organics No			
6. Method of excavation Trowel			
(cont'd overleaf)			
Stratigraphic relationships	Stratigraphic Matrix		
Below:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cut by:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Same as:	This Context <input type="checkbox"/> 16050		
Above:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fill of:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interpretation (with ...)			

Figure 1 - An Example Fill/Layer Context Sheet

3.1 Primary Data

Co-ordinates	These are the south-western co-ordinates of the 5m square in which the context lies.
Site Code	This is usually the main site code POU/CHF plus the last two digits of the year. If you are working on one of the satellite sites, the code may be different.
Trench No	This is the trench number in Roman numerals.
Context No	Every separate archaeological 'event' receives a unique context number by which it can be identified. The numbers run consecutively, and new numbers may be found in the current context record file.
Length, Width, Diameter, Thickness	All dimensions of contexts must be noted at the time of excavation, and not extrapolated later from plans.

Colour (Visual)	This is judged in terms of intensity and constituent colours. Full instructions on determining colour are in Section 3.3.1
Texture	A soil is made up from one, two or all three of the following constituents: Sand, Silt or Clay. The definitions are based on particle size, sand grains having a diameter of 0.06–2.00mm, silt grains 0.002–0.06mm and clay <0.002mm. The proportions must be judged by feel and the predominant constituent expressed last, so that a ‘sandy clay’ will be clay with an element of sand. Full instructions on determining matrix texture are given in Section 3.3.2
Consistency	A soil matrix may be compact, firm, friable (i.e. crumbly) or loose. Full instructions on determining soil consistency are in Section 3.3.3
Coarse Components	In a deposit, this will include any particles over 2mm in diameter, including stones and any other elements such as mortar, daub, carbonised wood etc. which are visible within the matrix. Instructions on determining the proportions of coarse components are given in Section 3.3.4. This must include a description of the materials used, their size and method of construction.

3.1.1 Description

This section should bring together all the details already listed above, to which may be added other information that may serve to clarify the description. This should be more ‘descriptive’ and not simply repeat a list of what has already been dealt with. No interpretative comments (such as ‘grave fill’ or ‘pit’) are allowed here. Remember this must be an objective and clear record of the context. This section continues on the reverse of the sheet where there is provision for the excavator to include a sketch a plan and/or a section. ‘Sketch’ does not imply any less accuracy of observation in the illustration of the context. It does imply the drawing is unmeasured. The drawing should not be over detailed but it should contain the important features within the context and, for a sketch section, show the size, shape, with enough accuracy to be recognisable. Appropriate conventions should be used and the drawing annotated with context number(s), positions of levels, level numbers, section lines, section numbers, etc.

Extent	Expressed as a percentage.
Relationship to other features	Record other contexts and/or features interacting with this context.
Distribution of other components/finds	Describe the distribution of any components and/or finds both horizontally and vertically. Are they uniform or concentrated in a specific area?
Water logging	Yes/No/Moderate?
Preservation of organics	Good/Bad/Variable?
Method of excavation	List all the tools used (e.g. trowel, dental tool, mattock, JCB).

3.1.2 Stratigraphic Relationships

Always ensure that any context number entered in the Relationships section is fully cross-referenced at the same time. This will save an unnecessary amount of checking later. The relationships between individual deposits and features are an essential part of understanding the chronology of a site. The basic principle of archaeological stratigraphy is that earlier deposits will always be overlain by later, and never vice versa. On sites this is complicated by human activity that may result in the removal of deposits, cutting down through earlier deposits and so on. All relationships fall into one of three categories which imply either that one context is ‘earlier than’ another, that it is ‘later than’ another or that it is ‘contemporary’ with another.

Below	List the context(s) by which the current context is immediately sealed
Cut by	Used only to list the context(s) by which Deposits and positive features are cut.
Same as	To be used when a single context has been given more than one

	number, e.g. in adjacent ditch sections or wall segments.
Above	List the context(s) which the current context immediately seals
Fill of	To be used for listing the Deposits that fill Cut features, e.g. postholes, pits, ditches, graves. Any context relating to earlier cuts, later recuts, earlier features or later features are ignored here

3.2 Secondary Data

The following sections are often completed by the Supervisor and/or Director and are not shown in Fig 1 above. However, if you know the information needed, fill it in yourself.

3.2.1 Interpretation

The Site Supervisor and the Director will fill in this section; this indicates what they believe to have been the function of a context and the processes that led to its formation.

3.2.2 Finds

Mark the appropriate box to indicate any finds you have. Most of the descriptions are self-explanatory but here are the less obvious ones:

CE	Ceramics
A Bone	Animal bone
B.M.	Building material
H Bone	Human bone

3.2.3 Indexing

This is the basic information relating to other records of the context and to technical aspects of its excavation not covered in the descriptive sections.

Small Find No	List here the numbers of all the small finds
Samples No	List the numbers of any samples taken from this context.
Plan No	List here the numbers of all the plans on which this context is drawn
Section No	List here the numbers of all the sections on which this context is drawn
Photographs (Digital)	Tick the box if a digital photograph has been taken showing this context and list the disk and image number(s).
Recorded by	Your name
Date	Date of excavation
Checked by	Supervisor's initials on completion
Date	Date of completion

Use the Context Record form as a checklist and make sure that there are no blank spaces that should be filled in. If in doubt **ask the Supervisor or Director!**

3.3 Soil Description

Soil descriptions should be entered on the Fill/Layer sheets in the boxes provided using the standard terms. The following instructions clarify the means of determining colour, soil texture, consistency and coarse components.

3.3.1 Colour

The colour should be taken when the soil is moist. All colour recording will be somewhat subjective, but the terms described below should be used in colour descriptions to achieve some standardisation. Use one or two (but no more than two) **colours** from the table below and modify each with a **hue** and a **modifier** as required.

Modifier	Hue	Colour
light	pinkish	pink
mid	reddish	red
dark	yellowish	yellow
	brownish	brown
	greenish	green
	bluish	blue
	greyish	grey
		white
		black

3.3.2 Texture

Estimate by following this procedure using a 20mm cube of fine soil:

1. Moisten and knead thoroughly to maximum plasticity and stickiness; add water as necessary to maintain this consistence throughout.
2. Roll the soil into a ball. If a ball does not form, the soil is a **sand**. Stop. If it does form, continue.
3. Roll the ball into a thick cylinder. If a cylinder does not form, the soil is a **loamy sand**. Stop. If it does form, continue.
4. Roll the cylinder into a thick thread. If a thread does not form, the soil is a **SANDY LOAM**. Stop. If it does form, continue.
5. Bend the thick thread into a U shape. If the thread breaks and feels gritty, the soil is a **sandy silt loam**. Stop. If the thread breaks and feels silky, the soil is a **SILT LOAM**. Stop. If a U shape forms, continue.
6. Roll into a thinner thread and form into a ring about 25mm in diameter. If the thread breaks, the soil is a **sandy clay loam**. Stop. If a ring just about forms and feels doughy, the soil is a **silty clay loam**. Stop. If a ring just about forms and feels fairly gritty, the soil is a **clay loam**. Stop. If a ring forms easily and has a smooth surface with sand grains clearly visible, the soil is a **sandy clay**. Stop. If a ring forms easily and the surface takes a high polish and feels sticky, the soil is a **clay**. Stop. If a ring forms easily, but is less sticky than a clay, the soil is a **silty clay**. Stop.

This is shown diagrammatically in Fig. 2 below.

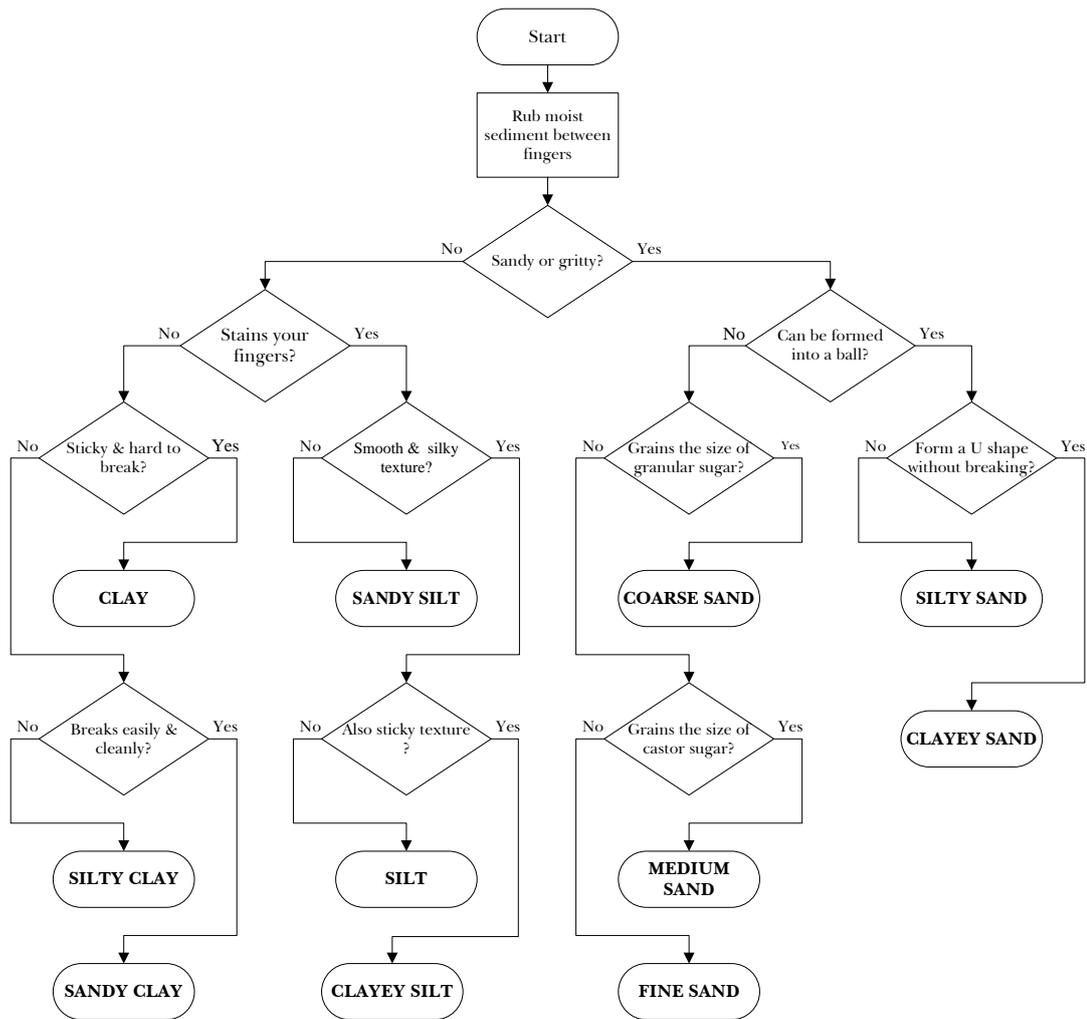


Figure 2 - Guide to the description of the composition of archaeological sediments.

3.3.3 Consistency

In a dry or slightly moist soil estimate consistency by crushing a large untrowelled cube between thumb and forefinger.

If there is no resistance, the soil is **loose**.

If it fails under low to medium pressure, the soil is **friable**

If it fails under maximum pressure, the soil is **firm**.

If it does not fail, the soil is **compact**.

In a moist or wet soil roll into 40mm threads after wetting and kneading to maximum plasticity.

If it will not form a thread 6mm thick, the soil is **non-plastic**.

If it will form a thread 4mm thick that will support its own weight, it is **plastic**.

If it will form a thread 2mm thick that will support its own weight, the soil is **very plastic**.

To determine stickiness squeeze a sample between finger and thumb after wetting and kneading to maximum stickiness.

If almost no soil sticks to the skin, the soil is **non-sticky**.

If it tends to stick to one surface and elongates slightly when pulled apart, it is **sticky**.

If it sticks to both surfaces and tends to form an obvious bridge when pulled apart, the soil is **very sticky**.

3.3.4 Coarse Components

This is a measure of the size, shape and roundness of individual stones. If possible, note the lithology, that is, the type of stone, e.g. flint.

3.3.4.1 Stoniness

Estimate the stoniness of the soil according to the following:

<1%	Stoneless
1-5%	Very slightly stony
6-15%	Slightly stony
16-35%	Moderately stony
36-70%	Stony
>70%	Very stony

3.3.4.2 Size

Give an estimate of the size range of stones present, e.g. Gravel–Pebbles. Describe the size of the stones according to the following:

2-6mm	Gravel
6-20mm	Pebbles
20-60mm	Medium stones
60-200mm	Cobbles
0.2-0.6m	Very large stones
>0.7m	Boulders

3.3.4.3 Shape and Roundness

This information helps to determine the nature and origin of the deposit. Shape is difficult to assess accurately in the field as it requires measurement of the axes of the stones, but it should be possible to say whether the particles are 'platy' (flat), 'elongate' (tube like) or 'spheroidal'. Describe the stone shapes as angular, sub-angular, sub-rounded or rounded using Fig. 3 below.

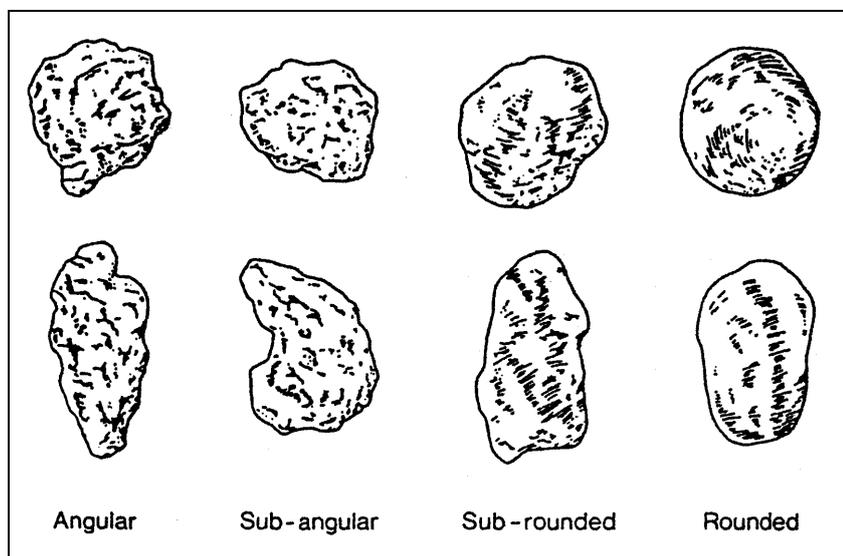


Figure 3 - Degrees of roundness in the shape of pebbles (redrawn after Powers 1953)

4. The Cut Context Sheet

This is the other contender for commonest record used at Poulton and every excavator should know how to fill in the primary data. It is important that the data is recorded at the same time as the excavation. Memory can play strange tricks. Figure 4 below shows the primary data recording section and following on are some notes on how to complete each item. **All cuts must be described in the following order and using the accepted terms.**

Poulton <i>Research Project</i>		Context Record - Cut	
Co-ordinates: 500E/410N	Site Code: POU/CHF/05	TRENCH NO. XVI	Context No: 16056
Length: —	Width: 22 cms	Diameter: —	Depth: 18 cms
Description (Sketch plan and section overleaf): 1. Shape in plan Sub-circular 2. Break of slope - top Sharp 3. Sides (° to vertical) 20° 4. Break of slope - base Gradual 5. Base (flat, convex, concave, tapering) Convex 6. Orientation DITCHES + GRAVE-CUTS e.g. E-W 7. Definition Sharp, well-defined. 8. Recut context no. 9. Method of excavation TROWEL			
Part of Group		Context Nos: 16050	
Stratigraphic relationships		Stratigraphic Matrix	
Below:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Filled by:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Same as:	This Context		<input checked="" type="checkbox"/>
Cuts:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interpretation (with reasons):			

Figure 4 – An Example Cut Context Sheet

4.1 Primary Data

Co-ordinates	These are the south-western co-ordinates of the 5m square in which the context lies.
Site Code	This is usually the main site code POU/CHF plus the last two digits of the year. If you are working on one of the satellite sites the code may be different.
Trench No	This is the trench number in Roman numerals.

Context No	Every separate archaeological ‘event’ receives a unique context number by which it can be identified. The numbers run consecutively, and new numbers may be found in the current context record file.
Length, Width, Diameter, Depth	All dimensions of contexts must be noted at the time of excavation, and not extrapolated later from plans. Full details on taking the required measurements are in Section 4.2
4.1.1 Description	
Shape in plan	Describe the shape at the top of the cut using the terms in Section 4.3.1
Break of slope–top	Describe the degree with which the top surface of the edge of the cut breaks into the sides. For more details on this measurement, see Section 4.3.3.
Sides	Estimate the slope angle in degrees from the vertical
Break of slope–base	Describe the degree with which the sides break into the base of the cut. See Section 4.3.4 for more details.
Base	Describe the base of the cut using the definitions in Section 4.3.5
Orientation	If linear, note the orientation (N–S, NW–SE, etc). If a post or stake hole, give direction of the top of the cut relative to the bottom, (for example; top is NE of base).
Definition	Describe how clear the edge definition is using the terms in Section 4.3.6
Recut Context No.	If applicable.
Method of excavation	List all the tools used (e.g. trowel, dental tool, mattock, JCB).

4.2 Secondary Data

The following sections are often completed by the Supervisor and/or Director and are not shown in Fig 4 above. However, if you know the information needed, fill it in yourself.

4.2.1 Stratigraphic Relationships

Always ensure that any context number entered in the Relationships section is fully cross-referenced at the same time. This will save an unnecessary amount of checking later. The relationships between individual deposits and features are an essential part of understanding the chronology of a site. The basic principle of archaeological stratigraphy is that earlier deposits will always be overlain by later, and never vice versa. On sites this is complicated by human activity that may result in the removal of deposits, cutting down through earlier deposits and so on. All relationships fall into one of three categories which imply either that one context is ‘earlier than’ another, that it is ‘later than’ another or that it is ‘contemporary’ with another.

Below	List the context(s) by which the current context is immediately sealed
Filled by	Used to list the context(s) of any Fills/Layers that fill this cut. Ignore any contexts relating to earlier cuts, later recuts, earlier and later features
Same as	To be used when a single context has been given more than one number, e.g. in adjacent ditch sections.
Cuts	To be used for listing any context(s) cut by this context – other than another cut!

4.2.2 Interpretation

The Senior Supervisor and the Director will fill in this section; this indicates what they believe to have been the function of a context and the processes that led to its formation.

4.2.3 Indexing

This is the basic information relating to other records of the context and to technical aspects of its excavation not covered in the descriptive sections.

Plan No	List here the numbers of all the plans on which this context is drawn
Section No	List here the numbers of all the sections on which this context is drawn
Photographs (Digital)	Tick the box if a digital photograph has been taken showing this context and list the disc and image number(s).
Recorded by	Your name
Date	Date of excavation
Checked by	Supervisor's initials on completion
Date	Date of completion

4.2.4 Sketch Plan & Sketch Section

These are on the reverse of the sheet where the excavator should include a sketch a plan and a section. 'Sketch' does not imply any less accuracy of observation in the illustration of the context. It does imply the drawing is unmeasured. The drawing should not be over detailed but it should contain the important features within the context and, for a sketch section, show the size, shape, with enough accuracy to be recognisable. Appropriate conventions should be used and the drawing annotated with context number(s), positions of levels, level numbers, section lines, section numbers, etc.

Use the Context Record form as a checklist and make sure that there are no blank spaces that should be filled in. If in doubt **ask the Supervisor or Director!**

4.3 Measurement Methods and Techniques

4.3.1 Shape in Plan

Describe the shape at the top of the cut using the following accepted terms: 'square', 'circular', 'sub/semi-circular', 'oval', 'sub-rectangular' or 'linear'. If 'linear' describe the edges, noting for example whether they are 'straight and parallel' or 'curving and irregular'. Should the cut not conform to these terms, describe it as 'irregular'. If 'irregular', describe the top according to the straightness of the edge, whether it has rounded or sharp corners and note the regularity or otherwise of the edge. If a cut is extremely complex it will be more efficient to refer to the plan and profiles.

4.3.2 Dimensions/depth

Record the longest side first. Dimensions should be in millimetres (1-99mm) and thereafter in metres (0.1-0.9m, 1.0-n.0m). Depth can either be measured from the highest to lowest point or, if the cut is large and/or complex, be calculated from the highest and lowest level readings. If a sloping stake hole is being described then the depth should be measured along the axis of the hole (Fig. 5).

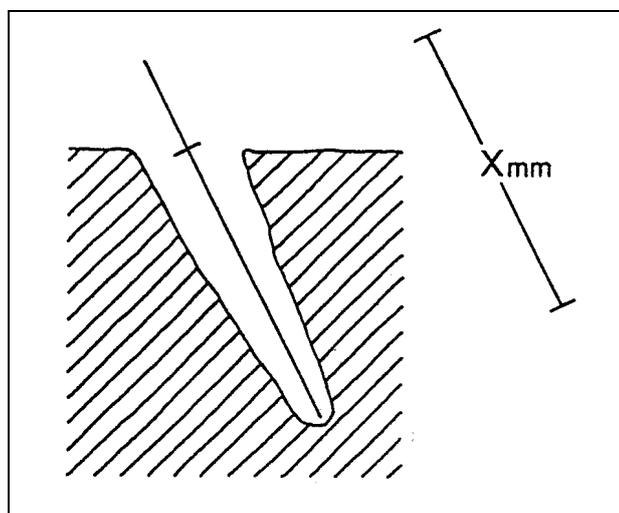


Figure 5 - The depth of the sloping stake hole is 'X'.

4.3.3 Break of slope – top

Use the following accepted terms: 'sharp', 'gradual' or 'not perceptible' (Fig. 6). Note that cuts are often truncated so this may not be the true break of slope.

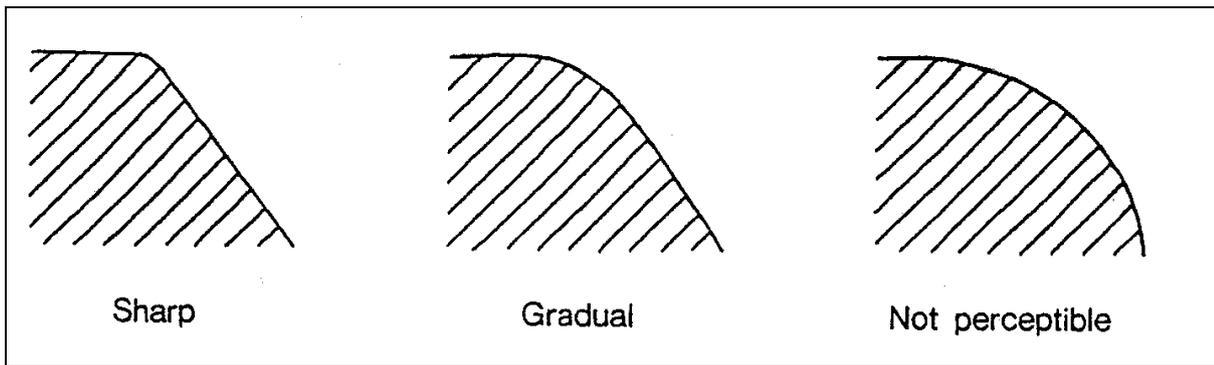


Figure 6 - Break or slope at the top of a cut.

4.3.4 Break of slope - base

Describe the degree with which the sides break into the base of the cut using the following accepted terms: 'sharp', 'gradual' or 'not perceptible' (Fig. 7).

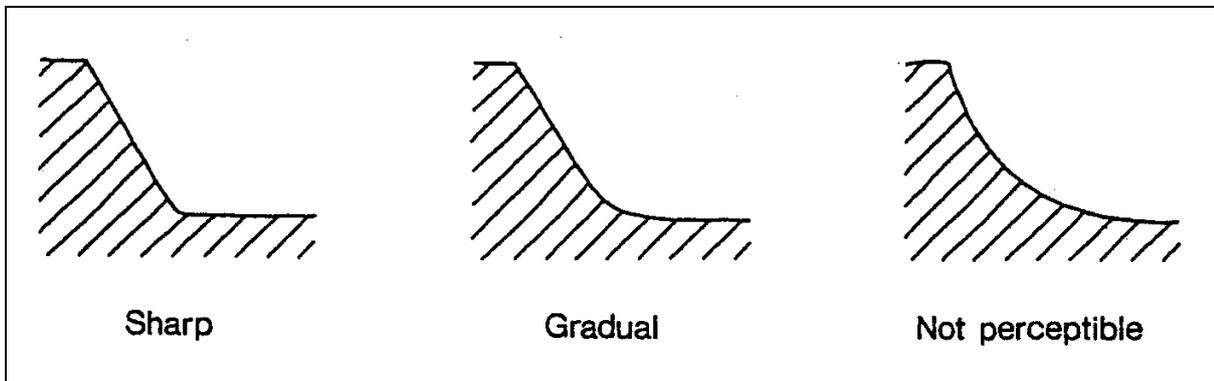


Figure 7 - Break of slope at the base of a cut.

4.3.5 Base

Describe the base of the cut, noting whether it is 'flat', 'concave', 'sloping' (give the direction of the downward slope), 'pointed', 'tapered' ('blunt' or 'sharp') or 'uneven'. Also give the absolute level of the base. In the case of post-holes, note whether the base has (Fig. 8):

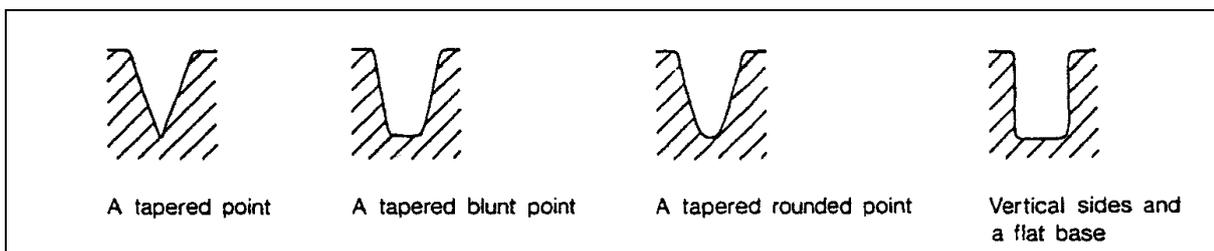


Figure 8 – How to describe the base of postholes.

4.3.6 Boundary Definitions

The boundary should be defined by using one of the following terms:

Sharp	Change occurs over 25mm or less
Clear	Change occurs over 25–60mm
Diffuse	Change occurs over 60–130mm
Smooth	The boundary edge is plain with few irregularities

Wavy	The boundary edge has pockets/depressions that are broad and relatively shallow
Irregular	The boundary edge has pockets/depressions that are deeper than they are wide
Broken	The boundary edge is interrupted.

5. Environmental Site Sampling Strategy

Ideally one would opt to sample every deposit on an archaeological site, including those that appear to be lithologically barren of environmental evidence in order to build up a complete picture for the site. This would provide samples representative of each context recorded on the site. This type of 'blanket' approach is not feasible and so a few guidelines have been designed and incorporated into this document in order to standardize sampling techniques. It is the responsibility of the excavation team however not to be too selective, for instance sampling on Roman deposits. There is a gap in the record in Saxon and Post-medieval so it is hoped these areas will not be discriminated against in future. (Very important – i.e. to eliminate bias in the archaeological record.)

5.1 Sampling

Standard volume is 30 litres. If only a small fill, then as much as possible. When large, ditches sampled up to 10 buckets.

1. Contexts to be recorded on sample labels.
2. Unpromising deposits (e.g. sandy loams with little cohesion or no visible organic component) can be left unsampled.
3. Sample only where feature clearly defined
4. Sample variations within features that are visible as separate contexts.
5. Do not sample areas of disturbance; note any burrows, earthworm activity etc; avoid backfill from past excavations.
6. Do not sample areas with no obvious stratification.
7. Do not sample if there is a risk of contamination.
8. Gather a composite sample of the horizon, taking soil from all over the single context to give a more representative picture

Point samples

1. Inside pottery vessels, attempt to remove soil adhering to the exterior of the vessel and bag separately and then place entire vessel assemblage in sealed bag leaving undisturbed the soil in the interior of the vessel.

Judgement samples

1. Areas of interest, dark earth, or ashy deposits that may be archaeologically barren may be sampled at director's discretion.

Floor surfaces of known date

1. Samples of the surface may be collected from various areas within a defined structure.

Ditches and waterlogged pits

1. Traditionally sampled at close stratigraphic intervals giving uniform results suggest two strategies:
 - a) Where the ditch or post hole has no distinct stratigraphy take 3 samples, one from the top and label 'top', one from the middle and label 'middle' and one from the base and label 'bottom'. If it is possible take a sample of the underlying soil and label this to be the surface beneath the feature.
 - b) Where there are clear bands within the feature then sample each horizon, note the depth at which the sample is taken and note the position of the samples in relation to each other, i.e., which is the top sample, the second sample, the third sample from the top of the feature and the base etc. Recuts should also be done in this manner and distinguished from the primary feature so that the two sets of samples are not confused.

5.2 Labels

1. Plastic labels to be written with waterproof pen.
2. Detail site, context number, sample number for each bucket, information on the feature from which the sample is taken e.g. ditch fill, posthole, recut, pit, etc.
3. Note if more than one sample has been taken
4. Note soil colour, description of texture and clarity of horizon.
5. Note possibility of contamination etc

Place the label inside a small sealed bag and then directly into bucket with sample. Mark on the exterior of bucket the site code, context number and sample number having first erased any former sample information from earlier sites.

6. Finds on Site - Introduction

Finds can provide both dating evidence and information about the activities carried out in the past at particular locations. Such evidence can indicate social or economic status, and can therefore have direct implications for the interpretation of the excavated structural sequence. It is also possible to elucidate patterns of production and trade by assembling the finds evidence from a number of different sites.

Many objects may be residual in the context in which they are found, however; even so both these and entirely unstratified finds can contribute significantly to research. They can extend knowledge of a particular category of find with new variants, more complete examples, and/or with a range of fresh detail. The mere fact that an item was found on a particular site can in itself be valuable information: valid inferences can be made to improve on the lack of associated data for many objects in the established collections both of museums and other institutions.

Finds retrieval: Finds of all categories and of all periods, are recovered as a matter of routine during excavation. In an ideal situation total recovery should be practised, but this is rarely achieved owing to a variety of constraints. Special techniques can be used to improve recovery - for example, sieving for total recovery of small items or fragments, and detecting for all metals. Such methods will be appropriate where it is important that as much finds evidence as possible should be recovered.

During normal excavation it is important for the excavator to keep an open mind about collection policy: in particular, objects that do not seem to be chronologically correct should still be retained. Biased evidence can easily result from selective collection within certain categories. For example, the preferential collection of samian ware — being bright red, it is highly visible — has led to inaccurate inferences being made in subsequent reports. Similarly all fragments should be collected, as more than one vessel, or object, of a particular form may be present. Sherds from the walls of vessels, for instance - even small fragments - can often be as informative as larger pieces.

Non-retrieval of finds should not be considered unless discussion has previously taken place with the Site/Finds Liaison Supervisor. This is particularly important when large quantities of a single find type are excavated; in this case the implications for current research need to be considered by the appropriate specialist. If any advice is required from the Finds Section, the Site/Finds Liaison Supervisor should first be contacted. They will be able to arrange for specialists to visit excavations and can arrange 'spot-dating' of significant contexts during excavation if this is essential.

It is important that where there is a possibility of obtaining information about industrial processes all relevant material should be collected, so that a full range both of the goods made and the stages of manufacture can be established. Samples from hearths, drains, pits or other features associated with industrial activity or industrial waste should be collected. Consult the Site/Finds Liaison Supervisor and the Site Environmentalist before sampling.

Waterlogged deposits include a wide range of non-ceramic objects in a fine state of preservation that are often of great significance. Pits and wells have also been found occasionally to produce remarkable assemblages of well-preserved objects. The Site Conservator should be contacted if such conditions are expected, before objects begin to be recovered.

6.1 Some Further Guidelines on Finds Retrieval Methods

Context type	Retrieval Method
Pit fills	Generally hand retrieval Bulk sample if prolific pottery (in particular, late Roman, Saxon or 12th–13th century date) or other finds. Sample concentrations of manufacturing waste, e.g. worked bone (in this case any worked and un worked bone should be sampled together). Bulk sample groups of pits sealed by the same layer, (in consultation with the Site Environmentalist and the Site/Finds Liaison Supervisor).

Wells/ Cesspits/ Drains	As above, but: Metal-detect spoil (or remainder of spoil if sampled); good metal preservation is likely in waterlogged conditions
Waterfront reclamation dumps/ Marsh deposits Ditch fills	Hand retrieval, and: Bulk sample (c. 50 bags). Metal-detect remainder of spoil. Hand retrieval: Test spoil with metal-detector, as good preservation of metal is likely
'Dark Earth'	Hand retrieval. Test spoil with metal-detector.
Middens	Hand retrieval. Bulk sample. Test spoil with metal-detector.
Floor surfaces/ occupation layers	Total bulk sample (i.e. 100%); 3-D plot if possible. (E.g. floor of sunken building).
Floor surfaces laid	Hand retrieval. Metal-detect <i>in situ</i> (e.g. tessellated floor).
Make-up dumps/Walls	Hand retrieval. Metal-detect spoil for dating evidence (e.g. coins).
Roads	Hand retrieval. Metal-detect <i>in situ</i> or as spoil for dating evidence (e.g. coins).
Hearths	Bulk sample.
Industrial deposits	Bulk sample industrial residues (e.g. slag). Metal-detect remaining spoil if metal waste products are present.
Grave fills	Metal detect <i>in situ</i> for shroud pins, jewellery and coffin nails/furniture. Look out for concentrations of nails that could represent hobnail boots: a conservator should lift these. Sample appropriate area if there are very small items, e.g. beads. (NB. 3-D plot grave goods).
Coffins	Consult appropriate curator and conservators via Site/Finds Liaison Supervisor; also consult Site Environmentalist.
Natural deposits	Is it natural? Test for prehistoric activity by continued excavation or sondage. Fluvial deposits may contain discarded objects that have settled below the surface: metal-detect top 100mm and spoil.
Any layer/Fill	Look out for concentrations of artefacts (e.g. coin hoards): sample or metal-detect surrounding area as appropriate. Concentrations of nails may represent decayed organic artefacts (e.g. hobnail boots, or wooden structures).

These guidelines complement those set out for environmental sampling (Section 5). Bulk samples are taken both for finds and environmental material, but where a sample is taken solely for finds - for example to retrieve a concentration of very small artefacts - this should be made clear on the labels/sample sheets.

Bulk samples will vary in size according to the size of the context to be sampled. From large contexts, such as waterfront reclamation dumps, 50–70 large bags should be sufficient. Samples from cut features will usually be much smaller. It may be worth taking 100% of some contexts, for example, well fills. Always consult the Site/Finds Liaison Supervisor and the Site Environmentalist before taking bulk samples.

6.2 Conservation of Finds on Site

Objects in the ground will decay to a point at which they are in equilibrium with the sediments surrounding them. After that point is reached, decay will proceed only very slowly. When an object is

removed from its environment this equilibrium ceases, and decay will accelerate unless a new equilibrium is attained. It is important, therefore, to treat finds as soon as they are removed from the ground.

In general terms it is advisable to retain finds within an environment approximating to that from which they have been removed. Finds from damp environments should be kept damp, and finds from desiccated environments should be kept dry. Few finds need to be cleaned immediately, and in many cases attempts to clean an object when first recovered may cause damage. If the excavator is uncertain about identification or treatment, the find should be maintained within the conditions in which it was excavated and the Site Conservator and the Site/Finds Liaison Supervisor should be contacted.

The Table below provides some basic on-site conservation guidelines for excavators.

Materials	Treatment	Packaging	Comments
Inorganic			
Metal – dry sites	Do not clean	Punched polythene bag in 'Dry Box' (containing silica gel); if fragile, cushion on acid-free tissue in a clear plastic box.	To avoid damaging objects all bags containing 'small finds' must be stored in a separate container to bulk finds.
Metal – wet sites	Do not clean	Air dry on trays, then as above	
Ceramic Stone Wall Plaster	If delicate, flaky or 'crumbly' may need extra support or lifting by conservation dept.	Polythene bag; handle painted surfaces with care. Put articulated sections on a flat support	As above
Shale Jet	Do not clean; keep wet	Double bag put in 'Damp Box'	Take to finds section on day excavated
Glass	If plain and robust (i.e. most Roman and post med.) bag dry; Saxon, med. and decorated glass should be kept damp or wet	Do not bag with bulk bone and pottery. Store med. and decorated glass in 'Damp Box'.	Treat glass as a 'small find'. Procedures may change for sites with large quantities of med glass (i.e. Monastic sites)
Organic			
Leather Wood Fibre Worked bone Antler Ivory Horn Tortoiseshell Amber	Do not clean; keep damp or wet. Check daily that damp or wet objects do not dry out while stored on site	Double bag; avoid handling. Store in 'Damp Box'. Do not separate components (e.g. shoes)	Contact finds section if waterlogged deposits encountered. Take individual finds to finds section as soon as possible
Combinations			
For example Shoe with Buckle Knife with Handle	Treat as for organics	Treat as for organics. These objects may need extra support	Take to finds section on day excavated; these objects often need immediate attention

7. Attachments

There are two attachments to this manual.

The first is a copy of the current “Risk Assessment” for the Poulton Site. Please read it thoroughly. You will be given a second standalone copy to sign and return to the site office.

The second is a copy of the current Conditions for “Working with Human Remains”. Please read it thoroughly. You will be given a second standalone copy to sign and return to the site office.



General Risk Assessment 2014

The purpose of a risk assessment is to identify possible causes of harm and measures needed to avoid these - before an accident happens.

A hazard is anything with the potential to cause harm. The risk is the likelihood that someone will be harmed by the hazard and the severity of the harm caused. A High Risk is one that is very likely to occur and/or may cause death or serious injury/illness. A Low Risk is extremely unlikely and/or would result in trivial or no injury/illness. A Medium Risk is in between these two. By carrying out a risk assessment, you can direct attention and resources where they are most needed to prevent injuries or ill health.

1. Full description of work to be undertaken, frequency and duration

This risk assessment is ongoing until the review date of 20th February 2015. The work being undertaken is mainly the excavation of the site. This involves the digging of trenches in and around Chapelhouse Farm in Poulton, Cheshire. The work will also include the erection and the taking down of tents at various times during the year. The work will involve the use of various tools on site; these include spades, mattocks, shovels and trowels. Mallets will be used for erection of tents. Other tasks include the washing of finds, surveying, drawing, photography and recording. A petrol strimmer will be used throughout the season on the site; it will only be operated by relevantly trained and qualified people. The use of heavy machinery (JCB, Dumper Trucks etc.) may occur from time to time.

2. Identified hazards involved in the work

Hazards identified relate to all aspects of the site as described in (1.) above and to all persons involved on the site; be they members of the public, volunteers, C.S.I. officers or students. Identified hazards: falling in trenches, injury from tools like spades, mattocks etc., falling from photo tower, tripping on tent guy ropes, and burns from camping stoves, sunstroke and sunburn.

3. All possible staff groups & individuals likely to be affected by the work

Members of the general public visiting the site, students, C.S.I. officers, volunteers and anyone involved in the running and the excavation of the site.

4. Controls to be implemented

General

Relevant sections of this risk assessment form are to be provided in advance to all persons involved in working on the site. Hard hats, gloves and heavy-duty footwear to be worn where appropriate by all personnel. All tools must be used sensibly and only for what they were intended and must be returned to the tool shed when finished with. Any deep trenches will be clearly marked and fenced off if necessary. All tent pegs in the ground must be clearly marked with orange caps. Personnel wearing protective gloves must remove any broken glass from the tent as soon as possible. All people working on site must protect themselves from strong sunrays to avoid suffering from sunstroke and sunburn. The operator of the petrol strimmer must wear goggles, gloves and protective footwear.

Fire

Each portacabin has a fire exit clearly marked with the green fire exit signs.

Electrocution

There is a small generator provided power supply on site. There is a risk of electrocution (low). The generator and any equipment attached must only be operated by authorised personnel.

Infection

All personnel working on site must:

Be current with their anti-tetanus injections

Be aware of and take precautions against Weil's disease.

Be aware that the fields in which the trenches are located are used as pasture land by cows. Cows can carry the E. Colli bacterium, which can get to people via dirty hands or through chewing grass stems from a pasture field.

Roundhouse

The roundhouse must only be entered by authorised personnel. Students and children must be accompanied by adults and only after permission from the Site Director or Supervisor.

5. Information, instruction, training required

This risk assessment to be issued to all workers on the site and they must be briefed on the site rules before starting any work.

6. Monitoring procedure to ensure implementation of (4)

All personnel must be aware of the need for safe conduct. A facility for monitoring the numbers of persons entering the premises is to be provided and recorded by appropriate personnel. The toilet facilities are to be inspected and cleaned regularly.

7. Level of residual risk after controls in place

General: low to medium

Fire: low

Electrocution: low

Infection: low

I, the undersigned, have read and understood the above. I agree to obey all reasonable instructions necessary maintain or reduce the residual level of risk:

Print Name: Date:.....

Signature:.....

Emergency Contact

Number:.....



Conditions for Working with Human Remains

Golden Rules

The Poulton Research Project makes every effort to comply fully with any law relating to the disturbance, excavation and care of human remains. In order to achieve this goal, we require everyone working with human remains to obey the following rules:

- We do not disturb human remains without good cause.
- We do not excavate human remains without good cause.
- We keep human remains covered on-site except when actually excavating them.
- We exercise care and sensitivity at all times when handling the human remains and treat them with respect and dignity.
- We excavate, handle, clean and store human remains according to the best practices known to us.
- We handle human remains such that we do not jeopardise the results of any reasonable scientific technique that might be applied to them (for example, extraction of ancient DNA or carbon14 dating).
- We examine, measure and record human remains to the best standards and practices of which we are capable and known to us.

Restrictions on photographing human remains

If you want to take pictures of the human remains from the Poulton site (including whole or part skeletons, individual bones, fragments of bone and teeth, and cremated bone), you may do so provided that you agree to only showing them to a restricted audience. In particular, if you publish them by physical means (hard-copy images) or electronically onto the World Wide Web, you **MUST** restrict them to an appropriate audience. Specifically, the pictures **MUST NOT** be made available to the general public. The Trustees of the Poulton Research Project wish to ensure that pictures of human remains from the Poulton site are in accordance with the legal requirements of their excavation licence to treat all human remains with privacy, respect and dignity.

I agree to all the above:

Signed:

Dated: