7.3 Recording

7.3.1 Introduction

The main differences between looters (what the Sicilians call *tombaroli* or *clandestini*) and archaeologists are that the *clandestini* find all the good stuff, and the archaeologists write a lot of things down. Careful recording is the defining feature of modern excavations.

Fig. 7.15 Stanford freshman Erinn Evans recording in trench N107 (2002). Jacqui Martin (also of Stanford) and Mauro LoCastro (of Salemi) are excavating a medieval pit

We have two interconnected recording systems: digital and paper-based. The digital system revolves around two Leica Total Stations, which record find spots and stratigraphic information with a margin of error of less than 0.5 millimeters. This is supplemented by a more extensive GPS (Global Positioning System) survey of surface features, with a margin of error of less than 2 centimeters. The data are then displayed and can be queried in the ArcView GIS (Geographic Information System) program. The paper system is controlled directly by the excavators, and revolves around standardized "context sheets" and a centralized stratigraphic ("Harris") matrix. These are supplemented by profile and plan drawings, photographs, and lab analyses of artifacts, faunal and floral samples, etc. The two systems meet when the context sheets, hand-drawn profiles and plans, and other data are digitized and entered into ArcView. The artifact database prepared in the lab will also be linked to ArcView, and the entire recording system will be available on the web in an XML (extensible markup language) format through a project run by the Alexandria Archive Institute of San Francisco (www.alexandriaarchive.org).

Bengt Westergaard from Gothenburg and Chris Sevara from Tucson run the digital system and provide on-site training in its use. They take three-dimensional recordings for special finds, walls, trench locations, etc. These can then be integrated into other GIS databases. But the Total Stations don't record stratigraphic information. By itself, the digital system produces only the kind of information in Wheeler's upper diagram in fig. 7.4 above. They're incredibly accurate and very fast, but their information only means anything when

fully integrated into its stratigraphic context. We spend the rest of this section explaining how this record works, and particularly the use of context sheets (fig. 7.17). You'll be directly controlling this system yourselves.

Fig. 7.16 Digital gurus Chris Sevara (left) and Bengt Westergaard (right) using the high-precision GPS, 2002

7.3.2 Recording sheets

The recording sheets are the backbone of the stratigraphic recording system. This cannot be emphasized too strongly. These standardize recording within and between trenches. They'll be the first place to look for all scholars interested in the site in the future. The trench supervisor's major responsibility is filling out the recording sheets, but the process of filling them out correctly must involve consultation, involving everyone digging in the trench, the assistant director, and the director. The trench supervisor should also keep a notebook discussing interpretation and problems, but the notebook is secondary to the recording sheets.

There are blank examples of the recording sheets at the end of this handbook.

The recording sheets should either be with you on site or in the project lab. Never take them anywhere else to work on them. We need to be able to get access to them immediately at all times, either on site or in the lab. As soon as you get back to the dig house at the end of a day, put the sheets in the designated place in the lab. Before going up to the site in the morning, go back to the designated place and get your sheets. If they're not there, ask the director right away.

There are two types of recording sheets: **context sheets**, relating to a specific layer, and **summary sheets**, relating to the whole trench. There are three types of context sheets ("normal" context sheets, continuing sheets, and structural sheets), and four types of summary sheets (starting sheets, small finds lists, closing sheets, and final Harris matrix sheets). Each type of recording sheet has a specific job to do, so **fill in everything on every sheet**. At the end of the season, arrange your recording sheets in their folder in the following order:

1 Starting sheet
2 Context sheets, continuing sheets, and structural sheets, arranged by order of layers.

Begin with layer ←. First you put the regular context sheet, then the continuing sheets (if there are any), arranged by order if the dates you filled them out. The repeat for layer ↑; then layer →; and so on. If a layer is a wall, it should have a structural sheet instead of a normal context sheet.

3 Small find list
4 Closing sheet(s)
3 Final Harris matrix

In the rest of section 7.3.2, we describe how to fill out the sheets. It's very important that you follow these instructions **exactly**.

7.3.2.1 STARTING SHEETS

Before you even begin digging, fill out one of these. First, fill in the boxes in the top row. The left-hand box says "Monte Polizzo Acropolis 200_"; remember to enter "4" at the end of the year number. If you don't know what zone and trench you're in, ask! Leave the last box blank. When you're happy that the sheet's complete, ask the assistant director or director to check it over, then s/he will sign and date this box to show that everything's correct. **Don't do any digging till the sheet has been approved**.

Draw a measured plan of your trench at 1:50 scale (2 cms on the plan = 1 meter on the ground). Assign a capital letter to each corner and write in their elevations above sea level. During the season, as you subdivide your trench into smaller trial trenches, come back to the

starting sheet and mark the position of each trial trench on it, labeling the corners and entering the elevation at that point on the modern ground surface.

As you uncover walls in your trench during the season, again come back to the starting sheet and sketch them in, marking on each the lower-case letter that has been assigned to it and its layer number, in a circle.

Finally, still before you start digging, ask the director for pre-excavation photos of your trench, and enter the numbers on the sheet.

7.3.2.2 **"NORMAL" CONTEXT SHEETS**

Before you do any digging, begin a normal context sheet for your first layer. Fig. 7.17 shows you a completed example from building A5 in 2003.

If you're beginning a new trench your first layer will be layer ←; if you're excavating a trench that was worked on in previous years, you'll continue the already-established numbering sequence. You must consult the previous season's records and check with the assistant director or director before starting digging to make sure you're starting at the right point.

Fill out the boxes in the top row, following the same rules as for the starting sheet, with the following additions:

(i) You may just be excavating part of your trench, rather than the whole area. We call such smaller units "trial trenches," and label them with letters of the alphabet, in the lower case. Always use the lower case, to distinguish trial trenches from trench corners, which are labeled in the upper case (i.e., you have Tta [trial trench a], but point A).

(ii) Enter the layer number. ALWAYS enter this in a circle: whenever you write anything about a layer, always circle the number, so it's easy to see. Remember that we use the Continuous Trench Numbering system. Your trench has a single continuous sequence of layer numbers; don't start new numbers for each trial trench.),

(iii) In the top right hand corner of the context sheet, write the trench number and the layer, for quick reference (e.g., K100 ±, as in fig. 7.17). Then fill in as much of the rest of the sheet as possible before starting to dig; anything that can't enter before digging should be entered as soon as possible. DON'T write the information in your notebook with the intention of transferring it to the context sheet later on. The context sheet is the primary recording location. The assistant director and director will ask to see the sheets on a regular basis; if information's missing they'll ask you to stop digging until all sheets it caught up.

Never allow the sheets to fall behind.

Never postpone filling in information. You can always change it if there's a mistake.

Never dig if there's information missing from the context sheets that can be entered right away.

Fig. 7.17, on pp. 76-77:

Completed context sheet for K100 layer ±, filled out by Stanford graduate student Kathryn Lafrenz, 10 July 2003. Note that <u>every</u> part of the sheet is filled out. The drawings are clear and simple; the writing is legible. The stratigraphy box has been filled in, and there's a straightforward interpretation of the deposit. There are plenty of elevations, and their locations are clearly marked in the sketch plans. The plans also indicate the corners of the trench, which way is north, and have a scale.

Monte Polizzo Acropolis 2003	Date, initials 10 VII 03	Zone A	Trench K100	Trial Trench	Layer (6) RUBBLE LAYER 1	Checked, initials, date IM 11/VII/03

I. DESCRIPTION

1. Color dark brown

2. Composition humus silt (clay) (sand) ash 70% clay 30% sand

3. Stones

Pebbles	(Many)	Some	Few	>20 cm	(10-20 cm) <10 cm
(Slabs)	(Many)	Some	Few	(>20 cm)	10-20 cm <10 cm
Other					

4. Compaction loosely compacted

5. Thickness 40 cm max

6. Shape in plan Rectilinear (southeast quadrant & K100)

7. Top elevation (A) 723.63 (B) 723.76 (C) 723.48 (D) 722.99 (E) 723.18 (F) 723.55 (see sketch plan for locations of elev

8. Bottom elevation, today (A) 723.62 (D) 722.98 (F) 723.46

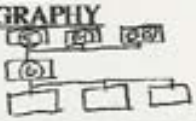
9. Excavation method trowel

10. Other comments SEE SECOND CONTEXT SHEET (PAGE 3 OF 3) FOR RUBBLE LAYER 2. RUBBLE LAYER IS EMBEDDED PARTIALLY IN (5), WHEREAS RUBBLE LAYER (2) IS PARTIALLY IN (5) and (7).

SIEVED: Y (N)

II. STRATIGRAPHY

This is layer (6)



III. INTERPRETATION

Internal External Structural Other (explain)

Interpretation: RUBBLE LAYER 1

Same as:

IV. RECORDING

Plan #

Date

Photographs BW CS D 13-16 (13-15 = facing east, 16 = facing west)

Profile # 2

Date 28 VII 03

Notebook pp.: 8-11, 15-17 Filmed? Y (N)

V. FINDS

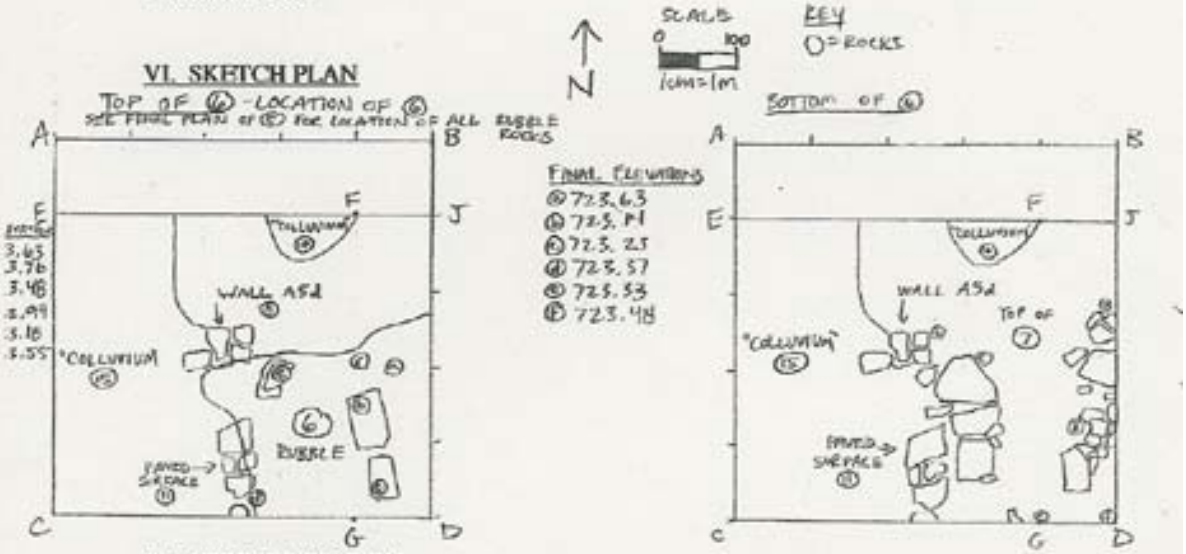
	(Fine ware)	(Coarse ware)	(Pithos)	Tile	Bone/ shell	Other
Number of bags	1	1	1			

Diagnostics	Black Glaze	Cor.	East Greek	(Incised)	(Gray ware)	Painted ware	Norman tile	Glazed

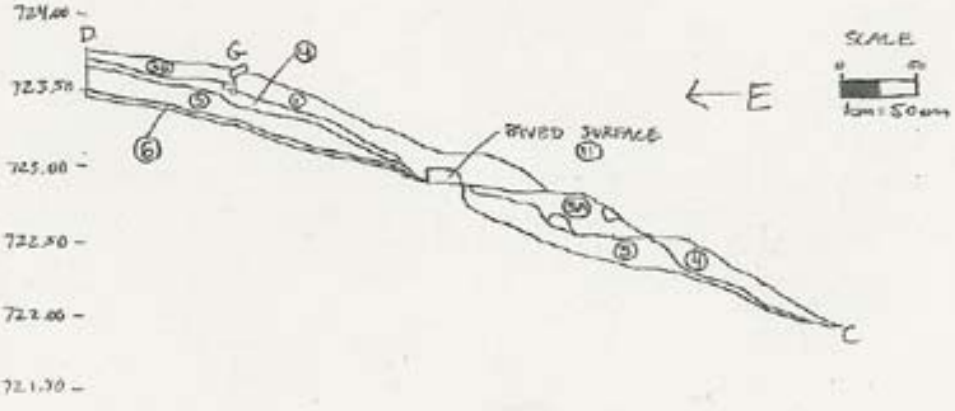
Small finds	#
	TS #
	Elevation
	Triang.
	Artifact #
	Description
Samples	TS #
	Flotation
	Charcoal
	Pollen
	Micromorph
	C14
	Other

Provisional date:

VI. SKETCH PLAN



VII. SKETCH PROFILE



Then fill out **all** the sections of the context sheet, as follows:

7.3.2.2.1 Description

Here you describe the actual soil that you're excavating. You need to respond to ten questions about it.

1. Color. At Monte Polizzo, this is usually some variation on "brown," but the color can be light, dark, consistent, or inconsistent; gray-brown, yellowy-brown, reddish-brown, etc. Occasionally it's a strikingly different color—white, black, red, gray, etc. In the 1970s archaeologists were fond of using Munsell color charts, originally designed for geologists, to classify soil color (so much so that they even introduced the verb "to Munsell" something), but Mediterranean soils change color as they dry out, producing enormous inter-observer error, if people Munsell the soil at slightly different moments. Rather than creating a spurious feeling of precision, simply enter a brief description. The color description must include three elements: modifier, hue, and color (e.g., dark grayish brown). Choose from the following list:

Modifier	*Hue*	*Color*
light	pinkish	pink
mid	reddish	red
dark	yellowish	yellow
	brownish	brown
	greenish	green
	blueish	blue
	grayish	gray
		black
		white

Sometimes a straightforward modifier-hue-color description will do; but sometimes the layer consists of several colors, like the "Oreo" soil created by some mudbrick collapses, where yellow clay contains many flecks of darker brown clay. When a layer extends beyond your trench into someone else's, **consult with the other trenches** and make sure you're all using the same descriptions. This applies to all of sections I.1-4 on the context sheet.

2. Composition. Basically, what's the soil like? At Monte Polizzo, there are five basic soil types: humus (i.e., topsoil), sand, clay, silt, and ash. The easiest way to establish soil composition is to rub a little of it between your thumb and forefinger. As a rough guide, humus is dry and crumbles into chunks; sand is gritty; clay is sticky, and can sometimes be rolled into little balls; silt feels smooth; and ash will virtually disappear, leaving a fine coating on your fingers.

Most deposits combine several types of particles. Where there are two constituents, the first word is the modifier, and the *second* word is the major element. So, when a layer consists of clay mixed with a little ash, it is ashy clay. When it is mainly ash with a little clay, it is clayey ash. You may have sandy humus, silty sand, etc.—basically any combination of humus, sand, clay, silt, and ash.

Where there are three (or more) constituents, give a rough estimate of the percentage of the soil that each element makes up—e.g., 70% sand, 20% silt, 10% ash. You can estimate this by spreading some of the soil on a sheet of paper and dividing it up into its constituent parts.

Remember that overly fine distinctions aren't always useful; most of the time, a two-constituent description is adequate.

Again, when a layer continues into other trenches, consult with the other trenches to make sure you all describe it the same way.

3. Stones. Like many Mediterranean sites, the soil at Monte Polizzo is full of rocks. The hill is made up of alternating layers of limestone and a sandstone conglomerate. The parts of the site where we're digging are conglomerate sediments formed 11-6 million years ago. The conglomerate has a sandy matrix, binding together large, water-rounded boulders. You can see the conglomerate well in the road cuts that we drive up to the site. On the context sheets, always refer to these rounded boulders as "pebbles." People built their houses from limestone slabs, almost certainly quarried from an outcropping 400 meters NE of zone A. On the context sheets, always refer to these flat limestone blocks as "slabs."

Often, the major contrast between layers is the stones in them. Many layers include both pebbles and slabs. On the context sheet, circle pebbles and/or slabs if either/both are present. The circle one of the three modifiers many/some/few, and one of the three measurements >20 cm/10-20 cm/<10 cm for the typical size of the pebbles and/or slabs. If you have other types of stone (unusual at Monte Polizzo) say so.

Again, when a layer continues into other trenches, consult with the other trenches to make sure you all describe the stones the same way.

4. Compaction. That is, how solid is the layer? Use the following terms:

(a) Loose: crumbles easily in the hand (typical of ash, sand, fill of tree trenches)
(b) Friable: crushes under gentle pressure (typical of humus)
(c) Compact: crushes under moderate pressure, but resistance is distinctly noticeable (typical of humus deposits under the surface topsoil)
(d) Hard: strong pressure required in the hand to crush the soil (typical of clay that's dried out)
(e) Very hard: very difficult to crush with the hand (typical of clay floors that have dried out, and burned clay)

Here too, check with other trenches when the layer extends beyond your balks.

5. Thickness. This is easy if the layer is a uniform deposit across the trench, but normally it's not. For example, a tree trench might be very deep in the middle, thinning till it disappears at the edges. Give as much detail as you think someone who's never been to the site will need to figure out what you're talking about.

6. Shape in plan. Most layers don't fill the entire trench, so what shape is it? Is it round, oval, linear, square? Keep the description simple.

7. Top elevations. When you begin excavating a new layer, you need get its precise elevations. Normally you'll use the Dumpy Levels that you'll be trained on at the beginning of the season (see section 7.3.6 below). Usually you need to take multiple readings, because the layers are rarely flat. Consult with the director and assistant director about how many elevations to take, and where, until you feel confident in making these decisions yourself. At Monte Polizzo most layers need at least four points.

Whenever possible, take elevations at the same points for every layer, directly above one another. The more complicated the deposit and the more sloping your trench, the more elevations you'll need to take. Number each elevation, and **on the sketch plan of the**

layer mark where each elevation was taken. If the layer runs into the balk, it's often easiest to get the elevation at that point, particularly if you can take the elevation at a labeled corner.

An important point: remember that we're interested in the height above sea level of the layer that this context sheet is describing, so if the layer runs into the balks of your trench and you're using the points A-G established at the beginning of the season, DON'T write down the height of that point on the surface; we want to know what elevation the top of the current layer was at that point.

8. Bottom elevations. When you've excavated away the whole of a layer, use the Dumpy Level to make new readings. As with question 7, number the elevations you take and mark the points on the sketch plan on the back of the context sheet. Sometimes you excavate an entire layer in one day; if this happens, you should write the elevations for the bottom of the layer on line 8. You can then subtract the elevations on line 8 from those on line 7 to get thickness measurements to enter on line 5, and the numbers you enter on line 8 for the bottom of (say) layer ↑ will often correspond to the top of (say) layer →, entered on line 7 of layer →'s context sheet.

Quite often, though, it takes several days to excavate a layer. If you haven't completed a layer at the end of the day that you begin it, enter on line 8 the elevations of the points at which you stopped digging that day. This is important—if there's any confusion and mixing of layers, we may be able to separate the finds into the correct layers if we know how much you removed each day. If you don't complete a layer in one day, when you start work the next morning you'll begin a continuing sheet for that layer (explained below).

9. Excavation method. What did you use to remove this layer? Trowel? Big pick? Etc.

10. Other comments. Anything that strikes you as significant. For example, you might observe that the junction between the layer you're excavating and the one above or below it is fuzzy, or that the layer was really hard to distinguish.

If there are significant inclusions in the layer, mention it here. Inclusions means things like chalk, charcoal, particular kinds of pebbles, etc., that help characterize the layer. Mention the inclusions' shape, color(s), and size(s).

Finally, the description section asks you whether you sieved this layer. You should consult the assistant director or director about when to sieve. Normally we sieve all closed deposits but not topsoil, tree trenches, or rubble collapses. Just circle Y or N.

7.3.2.2.2 Stratigraphy

In the central box, enter the number of the layer you're excavating. In the boxes above it, enter the numbers of those layers that you know date later; in the bottom boxes, the numbers of those layers that you know date earlier. Consult with the director and assistant director, because this is important information. You need to be thinking all the time about what the most important features in your trench are, and make sure that this section makes it crystal-clear how the layer under excavation relates to them. If you have walls, hearths, floors, or other major cultural features in your trench, include as many of them as possible here. Add extra boxes as necessary.

Always fill in the stratigraphy box.

Always include layers above and below the one you're excavating.

Always think about the relationship of the layer you're excavating to the most important features in the trench—walls, floors, hearths, pits, foundation trenches, etc. Always include these important features in the stratigraphy box.

If at any point you realize that a mistake has been made in earlier context sheets, tell the director or assistant director right away.

7.3.2.2.3 Interpretation

The first line asks you for basic information: is this layer part of an internal (roofed) space, an external (open air) space, a structural activity (e.g., a wall, a posthole, a ditch, a foundation cutting), or something else? Circle the relevant word; if in doubt, explain the situation under "Other."

Then, enter a **brief** description of what you think the layer is—e.g., a hearth, a pit, mudbrick collapse, building rubble, a tree trench, etc. Consult with your zone supervisor. This doesn't mean a description of what the soil was like.

"Same as": ancient activities often overlap several of our trenches, so what we call 2004 X99 ≥ may be the same as a differently numbered deposit is an adjacent trench, such as 2003 Y99 ∝. Figuring out the "same as" relationships involves consulting last year's notebooks and profile drawings, and discussing the stratigraphy with the people working in neighboring trenches.

Always fill in the "same as" box if the layer was partly excavated in a previous season or if it runs into another trench.

Any time you think that two of the layers you've excavated are in fact two parts of the same layer, consult with the director or assistant director and then mark this in the "same as" box.

7.3.2.2.4 Recording

Here you cross-reference the context sheets with the formal plans and profiles, drawn at 1:20 on large sheets of graph paper (as distinct from the measured sketch plans and profiles that you enter on the back of the context sheet itself), photographs, the trench notebook, and other filming.

Sections 7.3.4 and 7.3.5 below explain how to do plans and profiles. Each plan and profile that you draw in your trench is given a number specific to that trench, which you write in big letters on the plan or profile. The numbers and dates of all the plans and profiles that involve the layer you're working on get entered here. You'll mark the position of all formal profiles and plans on the trench's closing sheet (see below), and the assistant director will keep a separate log of their positions.

Enter here all the photographs taken of this layer, under the categories CS (color slides) and D (digital); the page(s) in the official trench notebook that discuss the layer you're working in; and whether or not there was any videotaping of the excavation in this layer. Photo numbers are always recorded inside rectangles, as | D.2-5 |, so they're easy to spot.

7.3.2.2.5 Finds

We divide the main categories of artifacts up into simple sub-categories. Pottery is split into fine ware, coarse ware, pithos (an ancient Greek word widely used in the Mediterranean for large storage vessels), tile (i.e., clay roof tiles), bone/shell, and "other"—any unusual categories that are needed that day. Under each heading, note how many bags you collected today.

The "diagnostics" category makes it easy to see at a glance what easily datable material came from this layer. Dr Blake will give one or more lectures on how to identify the different categories of finds at the start of the season, and in the field, you MUST have the director or assistant director review each bag of fine ware before you close it, to advise you on what diagnostics are present. This section is very important, because the context sheets then allow

people to assign a rough date to the layer at a glance. Just circle whichever categories are present.

"Black Glaze" is a type of imported Athenian pottery that only starts to show up in quantity in the late sixth century. Although we call it glazed, technically speaking it's not glazed at all, but covered with a very shiny black paint.

"Cor." means Corinthian imports, typical of the early sixth century, though at Monte Polizzo they seem to continue down till 500.

"East Greek" is also imported. The main cup types used to be thought to date 620-540 BC, but Monte Polizzo and other recent excavations have shown that the East Greek B2 cups continue till 500, or even later.

"Incised" means 6th-century indigenous wares with very distinctive decoration scratched with a sharp tool; we also enter indigenous stamped decoration under this heading, to save space.

"Gray ware" is the commonest indigenous material of the 6th century BC.

"Painted ware" means indigenous Iron Age matt-painted vases.

"Norman tile" is a very distinctive medieval roof tile, which is very light, and has lots of organic inclusions.

"Glazed" means medieval pottery with true glaze, usually lead-based and greenish.

Turn over the sheet: at the top of p. 2 is a section for "small finds." This means especially significant finds. Anything made of metal, worked bone, or worked stone counts as a small find, and certain clay items—particularly interesting pottery fragments, all lamps, and all loomweights. Consult in consultation with the director and assistant director about what to record as small finds. **Small finds must always be recorded in position by the Total Station**, unless you find the object during sieving. Always put small find (SF) numbers inside triangles, so that they're easy to spot (e.g., SF /1\). **Always** get the TS point number and the elevation from the Total Station team and write it down here. Also always take manually triangulated location readings (see section 7.3.7 below). The artifact # will be assigned by Dr Blake and entered at the lab, but you **always** need to enter a brief description on site, in consultation with director or assistant director.

Next there's a section for samples. Always call the Total Station to record samples taken for flotation, charcoal, pollen, micromorphology, or radiocarbon dating (during the main period of the site, in the 6th century, the radiocarbon calibration curve is almost flat, and C14 can only yield a date between 770 and 400 cal yr bc, so we haven't taken C14 samples; but if it looks like we might be getting back to 9th-century or earlier deposits, we'll start). Put an X against the category for each sample you take, and enter the TS number.

Mark **all** small finds and samples on your sketch plan, with the TS number.

Write in a provisional date after consulting the director or assistant director.

7.3.2.2.6 Sketch plan with elevations

On p. 2 of the context sheet there's space to enter a sketch of the plan and profile. Page 2 is on graph paper to make it easier to do this accurately. This isn't meant to be a great work of art, but it should be properly measured. Look at the examples in fig. 17.7. Normally you'll draw the plan at 1:100 scale (1 cm on the plan = 1 meter in reality), though you may need to vary that. **Always draw a scale on it** (don't write in the scale as 1:50, etc., because if people xerox the recording sheets they may reduce or enlarge them), and which way is north. **Always** label as many points as possible, particularly the A-G points, so we can relate the sketch to the trench sketch on your starting sheet. Mark on the sketch plan the locations of all Total Station

readings and elevation points that have been taken in this layer, including top, bottom, and any other points on the layer itself; small finds; flotation, micromorphology, and pollen samples. Every Total Station point needs its TS number and elevation. Also mark on the plan the points between which you're drawing the sketch profile. It's very important for this sketch plan to give an accurate sense of the shape of this layer and its relationship to walls, labeled corners, and elevation points. If the sketch plan starts getting crowded, draw a second plan and enter some of the data on that.

7.3.2.2.7 Sketch profile with elevations

Again not meant to be a work of art, but it needs to be clear, roughly measured, and fairly accurate; again, look at fig. 17.7. It's a quick drawing to show the relationships between the layer you're excavating and the other deposits you've already identified. In consultation with the director and/or assistant director, choose the most representative line along which to sketch the profile. Sometimes that'll be along one of the balks, and then you just draw what you see; other times it won't be along a balk, and you'll need to rely on the elevations that have been taken and on your own measurements to make the drawing. You might want to practice a little bit on a separate piece of graph paper before committing your drawing to the context sheet. **ALWAYS** enter at least 2 elevation points on your sketch profile. You'll normally draw the profile only when you complete excavating the layer.

7.3.2.3 CONTINUING SHEETS

If you don't complete a layer on the day you began it, you'll need to fill out a continuing sheet as well. As soon as you start work on the layer for a second day, enter the date and write day 2 of _ (leaving the _ blank until you complete the layer, when you'll know what number to enter). Then enter the top elevations for the layer at the point you started excavating today, which should be the same as the bottom elevation readings you entered on line 8 on the original context sheet. Then, as on the original context sheet, enter the details about today's photos, finds, SF's, samples, etc. Each continuing sheet has room for an additional 4 days of work; if your work in this layer goes beyond the fifth day, just start a second continuing sheet. As with context sheets, you need to get the director or assistant director to sign off.

7.3.2.4 STRUCTURAL SHEETS

Give each wall you excavate a lower-case letter as its name (assigned by the director) **and** a number in your trench's layer sequence. We'll normally refer to the wall by its letter, but on occasion its layer number is more important. Instead of filling out a regular context sheet for a wall, you fill out a structural sheet.

As soon as the wall's surface is cleaned, get the Total Station to map it. Get a printout of the Total Station plan that evening. Next day, check the plan against the stones in the ground ("ground-truthing") and if there are any problems, ask the Total Station to come back. **Attach the printout to the structural sheet.** For every wall, take at least 2 elevations on its top and at least 2 at its bottom (usually the highest and lowest points of its top and bottom courses, with more, as necessary). On the printout, mark the position and elevation of each of these points.

On the structural sheet, enter the number of preserved courses; total preserved length of the wall (including parts of it that lie outside your trench); typical sizes of wall stones; the layer that the bottom of the wall rests on; if the wall has a foundation trench, the layer from which that trench was dug, and the layer(s) into which it penetrates; the earliest layer(s) that definitely post-date the wall; the earliest layer that covers the top of the wall; the letter names of any

walls that this wall abuts (i.e., the walls it touches but is not physically built into); whether the walls are bonded (i.e., whether the stones are interleaved); and whether there is any other evidence for the relationship between the walls. Where the form asks you "Slabs / pebbles . Comments?" circle the category/ies of stones used. Finally, enter a brief description of the wall, and a sentence or two on its interpretation. When it's a slab wall, describe the slabs, using the following categories:

Rough hewn (i.e., irregular)
Roughly squared: approximately rectangular with rough edges
Squared: rectangular with sharp edges
Ashlar: mooth, accurately cut stones laid in regular courses

If there are traces of tool marks, or if the wall includes sandstone blocks, record this.

We need everything filled out.

If your trench contains walls that were excavated in previous seasons, fill out a structural sheet for each of these, in addition to new walls excavated this year.

7.3.2.5 SMALL FIND LISTS

At the back of your set of context sheets, keep a small find (SF) list. For each SF, enter its number. **Keep a continuous sequence for your trench**; don't begin at /1\ again in each new layer or trial trench. Even if your trench was excavated in previous seasons, begin at /1\ again in 2004 (this is in contrast to the system of layer numbering, where you continue the previous year's numbering sequence). Always enter SF numbers in triangles for easy recognition. Enter the layer the SF was in, the trial trench, its Total Station number (or that it was found sieving or cleaning), the date of its discovery, photo numbers if any were taken.

Un the "description" section, enter a few words telling us what the object is. Describe each find by material and function, using the following categories:
1) *Materials*. Bronze, iron, silver, gold, stone, carnelian, amber, bone, ivory, glass, faïence, plaster, clay.
2) *Function*. For metal finds, normally choose one from: bead, blade, bowl, chain, coin, construction material, fibula, figurine, flake, fragment, grater, hatchet, jug, knife, lid, nail, ornament, pendant, pin, plate, vessel, saw, spear, sword, tool, weight.

Use blade when you can't tell if it's a knife or a sword; flake for small pieces of very thin metal; ornament when it's not obvious what kind of ornament it is; vessel when it could be a bowl, jug, plate, or something similar.

If you find something that doesn't fit into these categories (e.g., gold death mask, suit of armor) let someone know.

For worked stone, normally choose one from: bead, die, doorpost, figurine, fragment, grindstone, mold, ornament, tool, weight.

Carnelian is a red stone; normally it's used for beads. Amber is crystallized sap importer from the Baltic Sea. It's translucent and orangey, normally used for ornaments.

For worked bone, normally choose one from: bead, disk, fibula, fragment, handle, needle, ornament, pendant, pin, tool.

Ivory is mostly used for ornaments; but in fact what people think is ivory almost always turns out to be bone.

Glass and faïence (a paste very like glass) were mostly used for beads, but the Phoenicians also made small flasks for expensive perfume from both materials.

Plaster has so far always been wall construction material.

Clay SFs are usually interesting potsherds, loomweights, tiles, figurines, or "other."

With potsherds, identify the fabric (Corinthian, East Greek, Attic black glaze, Attic black figure, Phoenician, Punic, indigenous incised or stamped, indigenous matt painted, grayware, medieval, glazed), the type of pot (amphora, bowl, cup, jug, pithos, plate), and, if necessary, the part of the vessel (base, belly, foot, handle, leg, lid, neck). When it seems useful, include a small sketch.

With a loomweight, say whether it's pyramidal, rectangular, or tapered; decorated (incised, painted; describe the motifs); pierced.

Tiles: most finds of tiles aren't very exciting, but sometimes the context makes a tile significant. Say whether it's a pan tile or a cover tile; what color it is; whether the fabric is dense or has inclusions; and whether it's medieval or ancient.

Use these categories whenever possible, to make comparisons between trenches more systematic; but if the object clearly doesn't fit into these materials or functions categories, it's very important to say so. The most peculiar finds are often the most interesting.

Finally, measure each small find, and write its dimensions down.

Make sure that Emma Blake sees all ceramic small finds from your trench. **Check with the director or assistant director on the description.** People who study the site later need to be able to get the basic information about the SFs from this list, rather than having to go through all your context sheets and correlate the information with Dr Blake's SF database. **Keep the SF list up to date**, and keep it with your other context sheets.

At the end of the season, ask the Total Station team to print out a map showing the locations of all small find spots and samples in your trench. Attach this to the small finds list.

7.3.2.6 CLOSING SHEETS

Because you'll be keeping the context sheets up-to-date as the digging goes along, at the end of the season all you'll have to do is fill out a closing sheet. On this, you enter a series of sketches, one for each layer you've excavated, showing its position within the trench and elevation points from its top. You should normally do these at 1:100, like the original drawings. If you've filled out the context sheets properly, you can simply copy these from your earlier sketches. If you have a particularly complicated set of layers, you might need to do it at1:50 to make the relationships clear.

The sequence of drawings showing the position of the layers is the main closing task, but there are also three smaller jobs:

1. Provide a simple plan showing the position of all the profiles you've drawn.
2. If your trench has changed shape significantly during the excavation, provide one or more plans showing this.
3. Provide one or more drawings showing the positions of the trial trenches that you divided the main trench into during the season.

7.3.2.7 **FINAL HARRIS MATRIX**

The last task is to draw up a final Harris matrix (explained in section 7.3.7 below) showing the relationship of **every** layer in your trench to every other layer, so far as the stratigraphic sequence allows it. During the season the director and assistant director will be meeting with you regularly to discuss the stratigraphy and draw up a series of provisional matrices, so the final matrix should just take a few minutes. If for some reason the director or assistant director don't discuss the stratigraphy with you regularly, or you're not making provisional matrices, draw their attention to this. Every trench must draw up a matrix at least every second or third day. It's the best way to make sure you've understood the interrelations of the layers properly.

7.3.2.8 The golden rules

If you do all these things, your trench will be a complete success, and you'll have made a significant contribution toward answering our questions. The recording sheet system really is the core of the recording for the whole excavation, and so long as you're in control of the context sheets and **keep them up-to-date**, everything will be fine.

There are ten golden rules:

1. Excavate methodically and carefully. Don't dig holes; keep the dirt clean; stop, sweep up, and discuss the situation the instant anything starts to change.
2. Fill out every box on the context sheets, and keep them up to date.
3. Remember that all your records will be posted on an open-access website, so:
   a) Don't write anything silly on the context sheets
   b) Assume that readers will have no previous knowledge of the site
   c) Write and draw clearly and simply. If your handwriting is hard to read, use capital letters
4. Always think about the relationships between the layers in your trench.
5. Do you know how the layer you're excavating relates to every other layer? If not, discuss it with the whole team, and then you need to talk to the director or assistant director.
6. Always look out for inconsistencies. Check the stratigraphy boxes: do you say that layer ± is above layer ″ on some sheets, but that ″ is above ± in others? If so, put it right.
7. Never ignore problems.
8. Discussion is the best way to resolve stratigraphic problems: involve the whole trench, other trenches around you, the assistant director, and the director.
9. Again, fill out everything on the recording sheets.
10. Again, fill out the recording sheets while you're on site; keep them up-to-date.

Finally, remember:

We use a Continuous Trench Numbering system for layers, starting either at ← or wherever the numbers left off in 2003.
We use a continuous SF numbering sequence within each trench, beginning anew every year starting at /1\ .
Walls are identified by a lower case letter (wall a, wall b, etc.), **and** get a layer number.
Trial trenches get a lower case letter (Tta, Ttb, etc.)
Corners are labeled with an upper-case letter (A, B, C, etc.)

Enter all layer numbers in circles: ←.
Enter all SF numbers in triangles: /1\. _____ _____.
Enter all photo numbers in rectangles: | D.1-2 | or | CS III.1-2 |.

7.3.3 Notebooks

In addition to the recording sheets, which form the core of the documentation system, the trench supervisors will also keep notebooks. The disadvantage of notebooks is that it's hard for people who didn't take part in an excavation to make sense of narrative accounts of the digging, and also hard to find specific things in them. But the disadvantage of context sheets is that they sometimes create a spurious sense of certainty: everything fits neatly into predesigned categories, even though reality is always more complicated. Use the notebooks to write down concerns about interpretation, how and why you change your mind, and details that don't fit into the rigid framework of the context sheets.

The notebooks are less formal than the context sheets, but please remember that they're still part of the official record. Everything will be posted on an open-access website where archaeologistst from all over the world can look at it, and the original notebooks and hard copies will be kept in the excavation archive at Stanford and in the library of the Archaeological Superintendent in Trapani, and at Stanford. If you write anything weird or disrespectful about any members of the project or our hosts in Sicily that's a serious breach of professional standards. If you write things that you think are funny, they probably won't seem funny to other readers, and you'll make yourself and the whole team look ridiculous.