



Churchyard survey: Creating a site plan and collating gravestone information

Why carry out a churchyard survey?

A churchyard survey is split into two sections. The survey should include a plan of the churchyard alongside individually surveyed headstones. Gravestone recording is vital as they are likely to change over time due to weathering and being overcome with moss and vegetation. Grave stone recordings can be used alongside census information to show snapshots of village life and to identify a person to a house or occupation within the village. The information can also be used to work out age-at-death or child death rates statistics, for example.

An accurate ground plan of a cemetery is a key element of any gravestone recording project. A plan will allow you to organise the information you collect in the field and will enable others to use your information in the future.

A plan of a graveyard is valuable as it allows individual memorials and family groupings to be located and descendants to easily find family gravesites. It also provides a record of all features in the burial landscape including buildings, burial enclosures, trees, paths and other features. A plan will enable changes in a site's appearance to be monitored over time to study the historical development of a graveyard including evidence of patterns of use, planting schemes and maintenance methods.

This survey guide will explain how to use the tape and offset method to create an accurate scale drawing, but a fairly good sketch of the churchyard is a great starting point to map out the locations of the gravestones. It is advisable to prioritise getting the individual gravestones recorded as they will be in gradual decline.

Equipment needed:

- A3 drawing board
- Graph paper
- Hard pencil e.g. 6H
- Pencil sharpener
- Magnetic compass
- 2 x 0.5m rods/pins
- 20+m non-stretch tape
- Digital camera
- Sticky tape
- Tracing paper
- Eraser
- Scale ruler
- 5m hand-tape
- Bulldog clips
- Drawing to scale

Method:

With only a few pieces of non-specialist equipment this fieldwork technique can be applied to any type of site, providing information that can open up all manner of opportunities for further study. The survey technique described is known as 'tape-and-offset'.

Contact should be made with the local vicar/cemetery superintendent to obtain permission to carry out the activity and for information regarding the condition of the monuments. You will also need to arrange a time when your activity does not conflict with other church activities.

It is useful to do a bit of background research to see what information has previously been gathered and recorded.





What is a scale drawing?


By creating a scale drawing of a site you are able to take measurements directly from the plan and convert them into actual dimensions on the ground. It allows for a greater understanding of the site, particularly in terms of how it may have changed over time, in both appearance and use.

Choosing a scale

When choosing the appropriate scale to work from you should consider the following:

- The dimensions of the site you want to record
- The level of detail that you want to record
- The size of the sheet of tracing paper on which you are drawing.


1:1,000 is a very small scale, whereas 1:20 is a large scale. The smaller the scale the less detail can be shown.

 **Tip:** Comparing what different scales look like using a scale ruler is helpful in working out the appropriate scale to use.

Scale	Measurement on ground	Measurement on drawing
1:1,000	1m	1mm
1:500	1m	5mm
1:100	1m	10mm
1:20	1m	50mm


The drawing board

Using clear sticky tape, attach graph paper so it covers a solid drawing board that is approximately A3 in size. Place the tracing paper on top of this, attaching it with more sticky tape.

 **Tip:** As accuracy is the point of the scale drawing survey, it is a good idea to set up the drawing board on a flat surface, and to run the ruler across the tracing paper as it is laid down, so that it is flat to the graph paper and doesn't move!

Tape-and-offset


This method of surveying a site allows you to accurately record the size of buildings and other features, as well as record their spatial relationships with one another in two dimensions. This is done by measuring the distance between objects and a straight line, known as a baseline. This is created with a 20+ m tape, set out across the site. The locations of objects are then plotted onto the drawing board at the chosen scale. A considerable advantage is that it does not require any specialist archaeological tools.

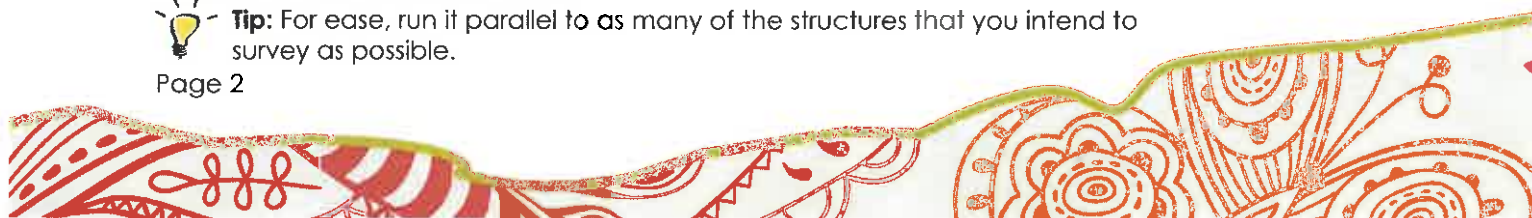
 **Tip:** Ideally three people are needed: one person to hold the tape over the object to be plotted, the second reads off the measurements, and the third plots the points on the scale drawing.

The primary baseline

All measurements are recorded against the primary baseline. This is undertaken in five easy steps:

- 1) Put a rod into the ground at one end of your chosen baseline, with the zero point of the tape attached to it.
- 2) Run the tape out to create the baseline, ensuring that it is level (i.e. not necessarily with the ground) and is not slack, before securing it to the other rod with a bulldog clip.
- 3) Having chosen your scale, draw the primary baseline across the tracing paper using a ruler. If you mark scaled increments (e.g., 0m, 2m, 4m, etc.), on the drawn baseline, it will make the recording process easier.
- 4) Use the compass to note the orientation of the baseline before recording it in the top corner of the scale drawing.
- 5) Finally, it is important to establish the location of the start and the end of the baseline. This is done by measuring both ends against two points of an immovable object, e.g. a building (see: Figure 1). At a later date you should be able to put a baseline in the same place. You are now ready to start recording objects!

 **Tip:** For ease, run it parallel to as many of the structures that you intend to survey as possible.





Using offset measurements

An offset measurement is taken perpendicular to the primary baseline, and extends to the particular point that you want to record (e.g. the edge of a wall, the corner of a gravestone). It can then be plotted against the primary baseline on the scale drawing:

- 1) Hold the 0m end of a second tape measure over the point to be recorded on the scale drawing, and run it to the primary baseline.
- 2) Making sure that there is no slack in the tape, swing the second tape in an arc across the primary baseline until the shortest distance is found – this means the tapes are perpendicular to one another.
- 3) The distance along the baseline and the second tape – which created the right-angle – can then be plotted on the scale drawing.
- 4) Repeat the above steps for the next point to be recorded. As more points are plotted, you can start to 'join the dots' – this produces an outline of the whole object you are wanting to record!

Recording Gravestones - Method:

Once you have plotted the location of the gravestones in the churchyard it is important to survey all the gravestones. This needs to include a photographic record of each gravestone, measurements and a copy of the inscription. Complete the survey form for each gravestone, this will allow you to have a consistent approach to the information you gather.

Some inscriptions will have weathered and may be difficult to read. Use large sheets of paper and crayons to create a rubbing, which will help to highlight missing letters and words.

When photographing gravestones make sure you always stand in the same position – in front of each one. Use your scale ruler in each photograph to provide a point of reference as a guide to the varying scales of each monument.

Complete a survey form for each gravestone so the following information can be collected: first name, surname, age at death, date of death, decoration, monument material. Give each gravestone a number, so that you can match the gravestone sheets to the graves marked on the plan.

Once the gravestones have been recorded you can then begin looking into the genealogy of the people buried. This social history research project will help you to see the connections between the names and village life. Who knows what you may uncover?

You may wish to refer to the Gods Acre scheme for advice to cleaning gravestones in order to gain better visibility.

Please be aware that the cleaning of lichens, moss etc from headstones is not recommended.





Where to find out more:

For further details on how to create a site plan:

- A Practical Guide to Recording Archaeological Sites
Royal Commission on the Ancient and Historical Monuments of Scotland
- A Manual of Archaeological Field Drawing
Hawker, J. (2001) Hertford, RESCUE
- Record Sheet and Report Templates, Risk Assessment Forms & Other Guides
Connolly, D. (2009) BAJR Practical Guide Series

For churchyard care:

- Caring for God's Acre - www.caringforgodsacre.org.uk
- Lincoln Diocese - www.lincoln.anglican.org
- Lincolnshire Churches Trust - www.lincolnshirechurchestrust.org.uk

