Topographic maps

A_L2TS

Mill Waters Parks and Reservoir

well read informed communications

This education Pack developed by Kate Dawson at Well Read in consultation with local heritage groups and schools. Particular thanks to Denis Hill, Heritage Consultant for his help providing historic background.

at Mill Waters Heritage Site

Archaeologists help conserve heritage

- Archaeologists are detectives. They dig beneath the ground to find out clues about the past.
- Some archaeologists are also experts in surveying buildings and monuments and finding ways to preserve them.
- Notre Dame Cathedral in Paris was badly damaged in a fire in 2019. It is so important as a heritage building that £1bn was raised to restore it within 20 years.

The Portland viaduct at Mill Waters

Surveying heritage assets

Some of the different types of survey activities archaeologist undertake:

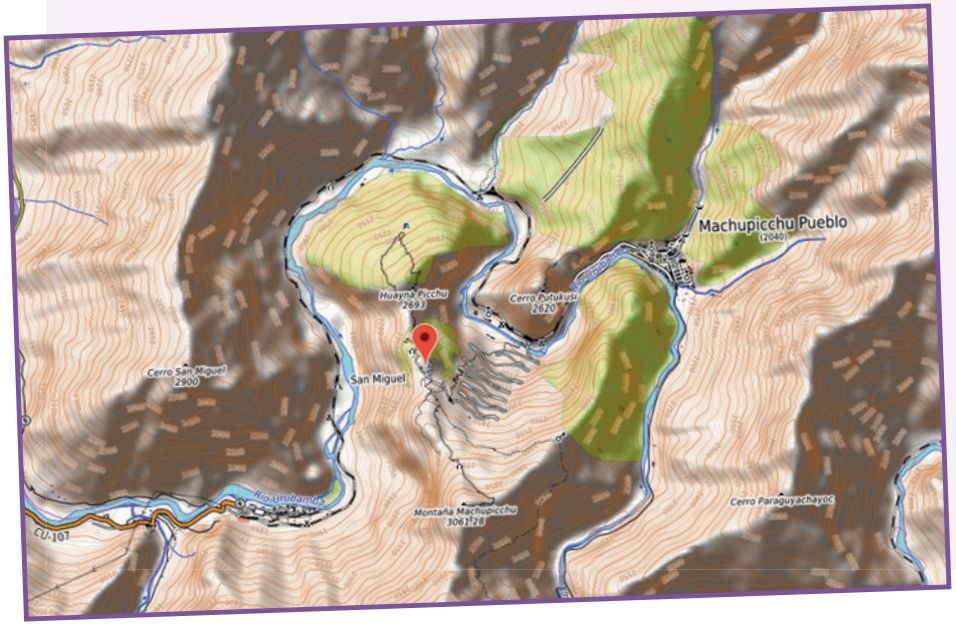
- Taking photographs.
- Making drawings of a structure or detail within a building.
- Conducting digs around the site.
- Taking measurements and creating a topographic map or plan of a heritage site.

What is a topographic survey?

- A topographic map provides precise information about the landscape.
- It can help archaeologists understand the surroundings of a heritage asset or site and how best to conserve it.
- They are also useful if you go hill walking, so you know how big hills are before you climb them!
- They also help architects decide where to locate new buildings taking into account things like trees, power lines and water bodies.

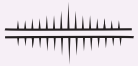
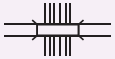
Machu Pichu in Peru

Machu Pichu is known as the Lost City of the Incas. Most archaeologists believe that it was built for the Inca emperor Pachacuti (1438–1472).

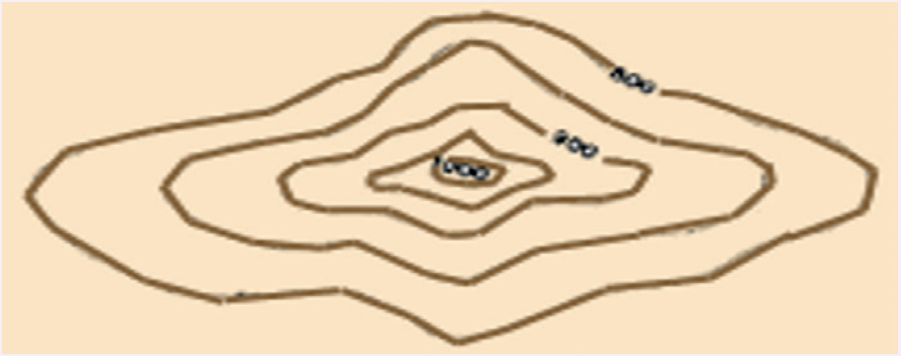


A topographical map of Machu Pichu.

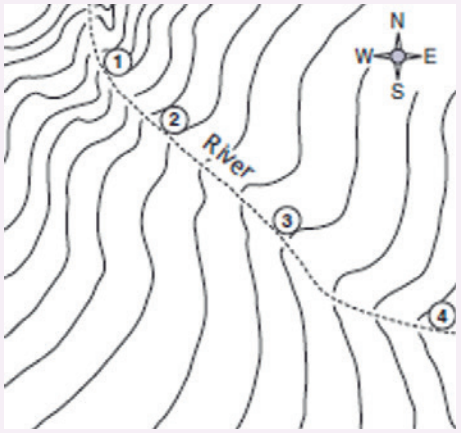
How to read a topographic map

Deciduous trees		Evergreen trees	
Woods		Orchard	
Marsh or swamp		Rough pasture	
Rocks		Sand and shingle	
Embankment		Cutting	
Railway (single or double line)		Path	
Road (fenced)		Road (unfenced)	
Bridge		wall and gate	
House (brick)		Green house	
Shed with open sides		Shed with closed sides	
Fence		Hedge	
Concrete or brick drain		Earth drain	
River		Canal with lock	
Boundaries		Lake or pond	

How to read a topographic map



Peak of a hill



River flowing down a hill

How are topographic drawings created?

- Archaeologists start a topological survey by marking the corners of their site with survey nails.
- They then take lots of measurements using a tripod mounted ‘total station’ which uses lasers to measure the distance between one point and another.
- They may also take measurements using a conventional tape measure.
- The measurements are then put into a computer programme to produce a digital drawing of the plot.