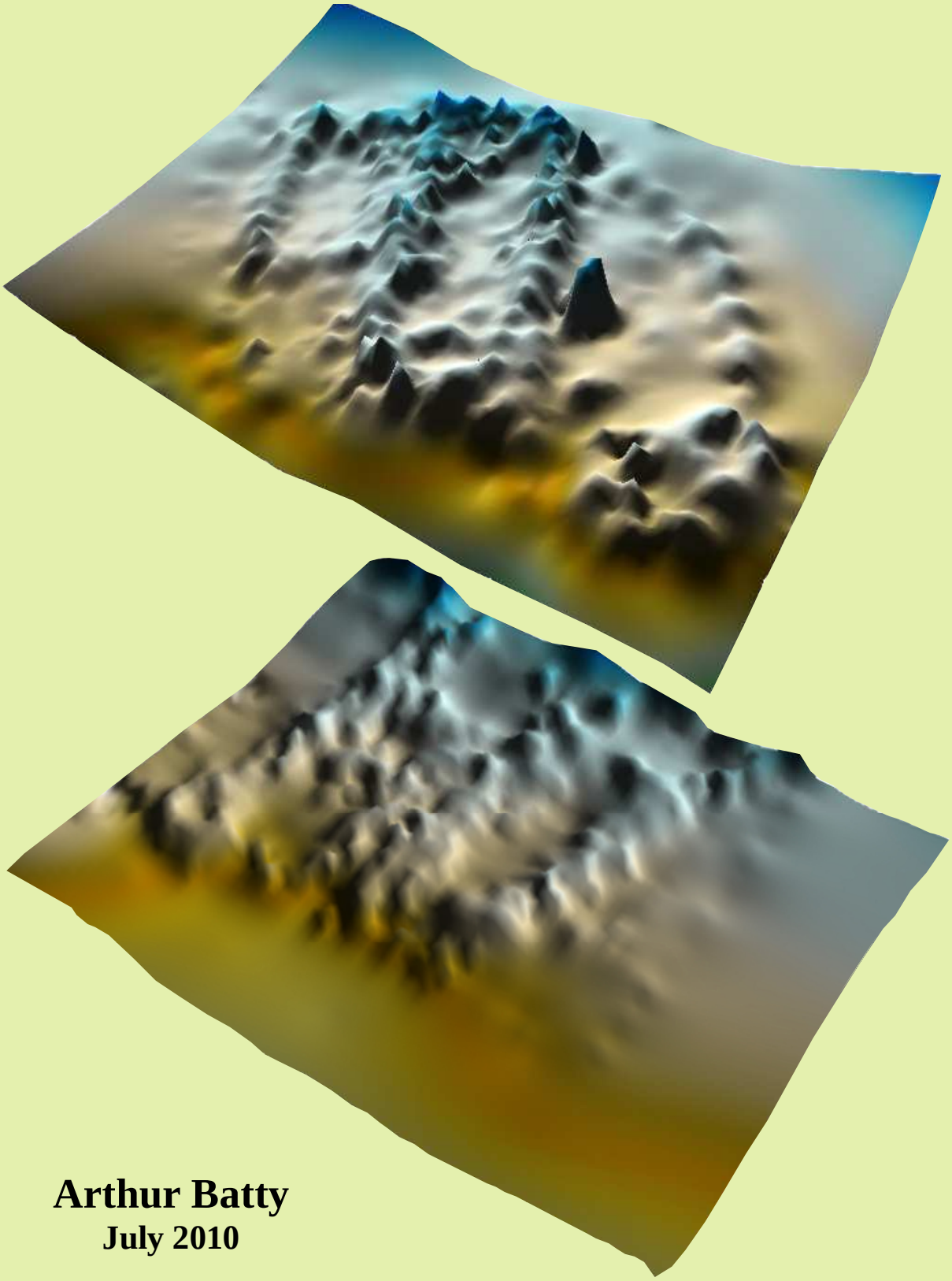
Archaeological Remains in Clapham Bottoms



Arthur Batty

July 2010

Front cover

Topological survey of Site 1 and Site 2
Top: Site 1
Bottom: Site 2

Surveyed by J Price & A Batty

Acknowledgements

The author would like to thank the following people for their help and support during this archaeological research.

Dr. J. Farrer for giving permission for access and supporting this research.
Noel Crack for helping with the geophysical surveying.
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Anita Batty for desktop publishing, editing and valuable advice.

Archaeological Research in Clapham Bottoms

Between February and June 2010 we carried out surveys and research of archaeological remains (Fig 1 and Plates 1 & 2) in an area called Clapham Bottoms SD 7550 7200, to the NNE of Clapham Village in North Yorkshire. Site 1 (Fig 2) is an enclosure of 11 acres that contains the remains of three structures and several smaller enclosures. Site 2 (Fig3) is an area of three large abutting enclosures with a total area of 11 acres, within which there are several smaller enclosures and the remains of three structures.

Aims and Methods

The aims of this research were to define the period and type of settlement, and classify the wall remains. Work commenced with a topographical survey of the full extent of each enclosure and, subsequently, a gradiometer survey was carried out on the main structures of each site. It is always difficult to know whether the high readings on a gradiometer survey are the result of burning, such as hearths, scattered burnt stones, or ferrous metals. To overcome this problem a metal detector was used to differentiate between areas of burning and metallic objects and also between ***types*** of metal.

Walls Remains

In this paper we refer to enclosure walls and structural remains as these ***are*** the only visible remains. For clarity Fig 4 shows our interpretation of two types of wall remains found on these sites i.e. a single row of othostatic stones (a) and double-faced wall with infilling of stones and/or sods (b).

Site 1 (Grid Ref: SD 7587 7203)

On Site 1 a gradiometer survey (Fig 5) over two rectangular structures revealed a small number of high readings and the metal detector gave no readings, indicating that these were burnt areas, one of which was examined and proved to be an occupation layer containing charcoal. The larger rectangular structure has an entrance at the northern end and immediately through this entrance, on the western side, there is a circular, internal feature with no evidence of burning. However, immediately ***outside*** the entrance, there is a burnt area approximately 1.7m diameter. The remains of the smaller rectangular structure are not as substantial as the larger one, possibly indicating it was related to stock housing, with or without a roof. Immediately to the SE of the larger structure are the remains of a possible gritstone-built burial cairn, that has suffered considerable stone robbing, probably used to construct the adjacent building. Gritstone is commonly used to construct cairns in the area, although there are a few built of limestone. A gradiometer survey of this feature (Fig 6) revealed several anomalies, but no further investigation has been done. To the NNE of Site 1 is Tiddeman's Pot (Warren, 1981). As can be seen on the drawing (Fig 7) this has a vertical shaft of approximately 51ft and a sump filled with water that descends to

approximately 78ft. The pot is a natural well and may have been used by occupants of the site, as it is the nearest water supply.

Site 2 (Grid Ref: SD 7569 7183)

Site 2 has two rectangular remains - one of which is not clearly defined at its western end, and there is the possibility that it may have been longer than shown on the survey. The southern rectangular remains have a small feature attached to the SE corner, it is difficult to know if this was initially round or square. Adjacent to these are the remains of a square structure. The gradiometer survey (Fig 8) shows several high readings in the two rectangular remains and a concentration in the square one. Three of these high readings were investigated - one in each of the rectangular remains and one on the western outside edge of the square remains. A broken sword blade (Plate 3) was found in the southern rectangular structure, a spoon auger (Plate 3) in the northern structure and a piece of lead (Plate 6) adjacent to the square remains. The outer, eastern and western, enclosure wall remains abutt Trow Gill to the south, but there is no visible remains connecting them. The ground falls steeply into the Gill and the wall may have collapsed down this slope leaving no trace. If an outer wall had been present here the area of Site 2 would have been 11 acres.

Topography

A topographical survey (see Fig 1) does not show any structural connection of the outer enclosure walls of Site 1 and Site 2 suggesting two separate settlements and perhaps separate dates for initial occupation. There are other wall remains in Clapham Bottoms but these are of a more linear construction, and probably represent much later enclosure.

Radiocarbon Dating

Charcoal samples were taken from both sites - the locations are shown by red dots on the aerial photographs. Both were radiocarbon dated (Figs 9 and 10) these show that the highest probability for the period of occupation of Site 1 is AD 760-900 (SUERC Ref: 28315) and for Site 2 AD 530-670 (SUERC Ref: 28314). With the inherent error probabilities in dating there is a small percentage probability that the period of occupation of Sites 1 and 2 may overlap for a short period of time.

Sword Blade

The sword was sent to Canterbury Archaeological Trust for X-ray (Plate 4) this shows the blade is pattern welded and of high quality. Plate 5 shows the detail of the fullering and Fig 11 is a reconstructed drawing of the blade. This type of blade fits into the Anglo Saxon period and adds to the dating evidence (Oakeshott, 1998).

Spoon Auger

The spoon auger is shown in Plate 3. These were used for boring holes in timber. The boring of holes through various types of joints and then driving a wooden peg through was a common method used in timber-framed buildings. Fig 12a shows this method and Fig 12b is a drawing of the spoon auger.

Lead Waste

The lead waste (Plate 6) is a common find on sites where metalworking has been carried out; it has been used in more recent times for fixing iron gate hangings into stone gate stoops, and it was also added to other metals to make them run easier in the casting process.

Conclusions

There is a considerable difference in the gradiometer and metal detector surveys, Site 1 having no evidence of metal working and probably an agricultural settlement, Site 2 having additional evidence of metalworking and woodworking. The structures on the two sites ***are*** similar, in as much as they are rectangular, but the largest structure is on Site 1 (Plate 7). The circular feature within this structure (a) shows no evidence of intense burning on the magnetometer survey and it is difficult to define it's purpose, although it has to be borne in mind that a structure built of limestone, ***and*** burnt, may not be detected by the magnetometer as there may be no, or at least very low, levels of iron compounds in limestone, but in this instance some sandstones are present. If these had been fired they should have shown as high readings by the gradiometer because sandstone usually contains iron compounds. The circularity of this feature, and its location, leads us to speculate that it may have been used for drying grain and could be an earlier form of the type found in Blackhouses around Scotland and the outer isles. This speculative statement is further enhanced by the magnetometer evidence of the large burnt area, shown on Plate 7 (b), in close proximity to the northern end of the building. If this had been a pit where fires were lit, there is a strong possibility that the hot air could have been ducted, by a flue, under the outer gable wall and into the circular feature, forming a crop- drying kiln (Fig 13). This scenario also explains the geophysical evidence that the stones in the circular feature have not been in direct contact with fire but only hot air entering through the flue. Excavation would establish if this structure was a drying-kiln and sampling for Phytoliths could provide evidence of crop growing, adding to the agricultural status of Site 1. The remains of the rectangular structure are composed of a large number of gritstones, as are the remains of the proposed burial cairn to the SE, leading to the conclusion that the cairn was robbed out to construct this adjacent structure. There does appear to be more recent remains on top of the cairn and these may be contemporary with the rectangular buildings.

We do not know how the sword blade fits in with the interpretation of the site, as it was found directly under a foundation stone of one of the structures on Site 2 and no deposits were evident between the sword and the foundation stone. It could have been placed there

deliberately at the time of construction or hidden there later. The lead waste, spoon auger and large number of areas having metal deposits suggest industrial activity. Other anomalies that have not been examined could give further indications of similar activity.

Both sites are approximately 11 acres - whether this is coincidence or was planned is unknown. These areas of enclosure suggests some degree of livestock farming was taking place eg. sheep, cattle, horses, pigs and goats. The fells around the enclosures would probably also be grazed, with the enclosures being used more as holding areas, for example in lambing time; periods of bad weather in winter, or growing crops. This valley is south facing, in the sun for most of the day and the underlying limestone geology has created a calcareous soil that is beneficial to agriculture.

Achievement of Aims

This research has classified the wall remains found on the two sites; successfully dated both sites to the Anglo Saxon/Early Medieval period with the possibility that Site 2 extends into the Norse period and also shown there is a difference in the activities being carried out on the sites. It has always been our policy to put our research into the public domain, and to update when more information is obtained - this research will be no exception.

Equipment used in this research

Leica 407 Total Station.
Geoscan F36 Gradiometer.
Leica S8 Apo Microscope.
Mikrokopter Hexacopter.
Garrett Ace 250 Metal Detector.
Trimble 5800 GPS.
Juniper Systems Archer Data Logger.
Ricoh GX200 Digital Camera.

Software

Field Genius Standard.
Surfer 9.
Adobe Photoshop 7.
Adobe Illustrator.
Turbocad.
Microsoft Office.

Further information about any of the above equipment and software can be obtained on the Internet.

Bibliography

Batty. A., (1997) *Wall Remains.* In Ingleborough Archaeology and Local History Magazine Issue 1 - Vol 1 April 1997 pp 10-11

Oakeshott, E., (1988) *Records of the Medieval Sword.* Boydell Press, Suffolk UK

Warren S., (1981) *Tiddemans Pot.* Craven Pothole Club Journal Vol 6 No 3

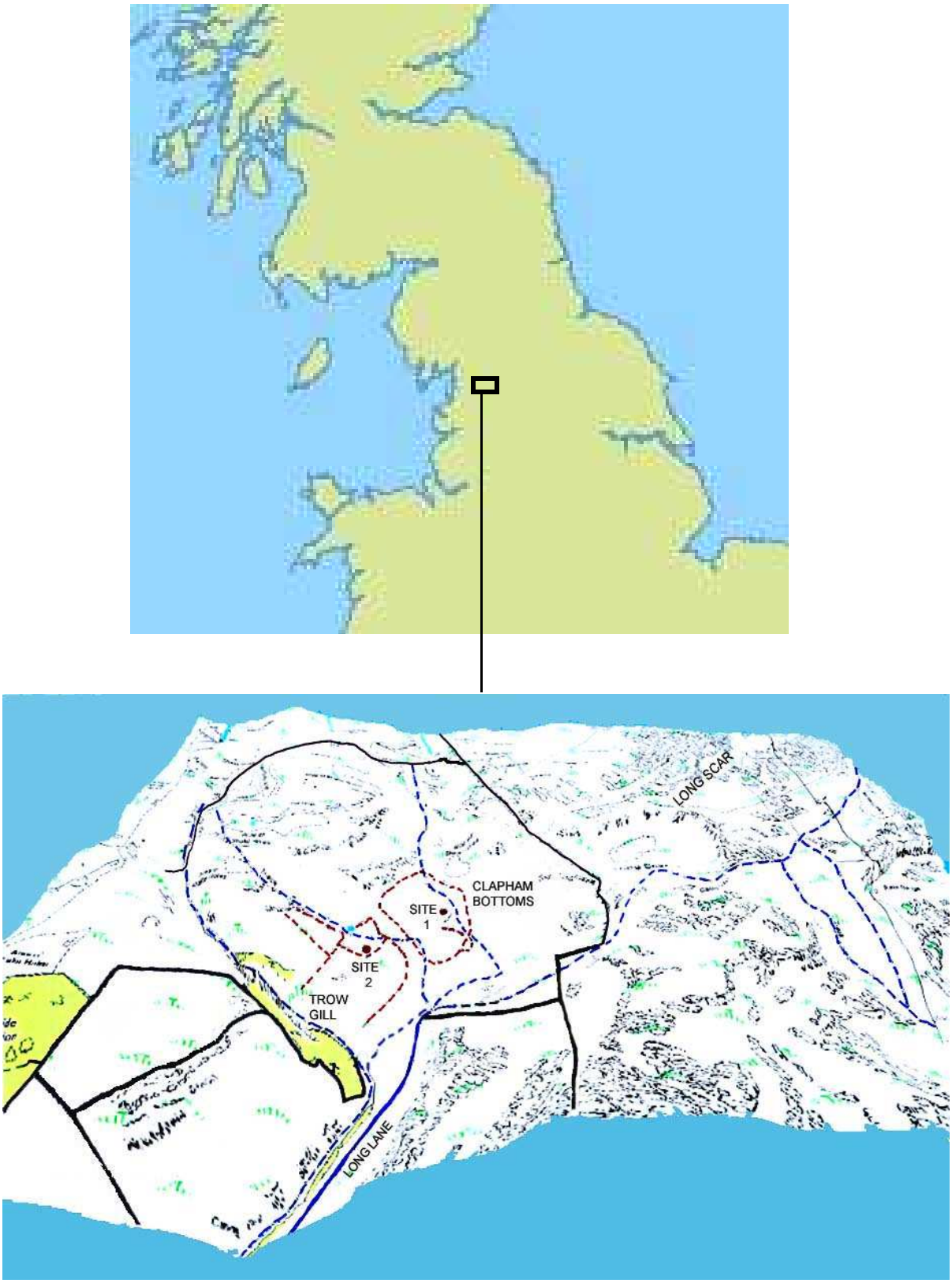
Radiocarbon Dating

The radiocarbon dating was carried out by SUERC (Scottish Universities Environmental Research Centre) located at East Kilbride, Scotland.

X Radiography

Carried out by Canterbury Archaeological Trust, 92a Broad Street, Canterbury, CT1 2LU.

Location Map



Clapham Bottoms - the area of research

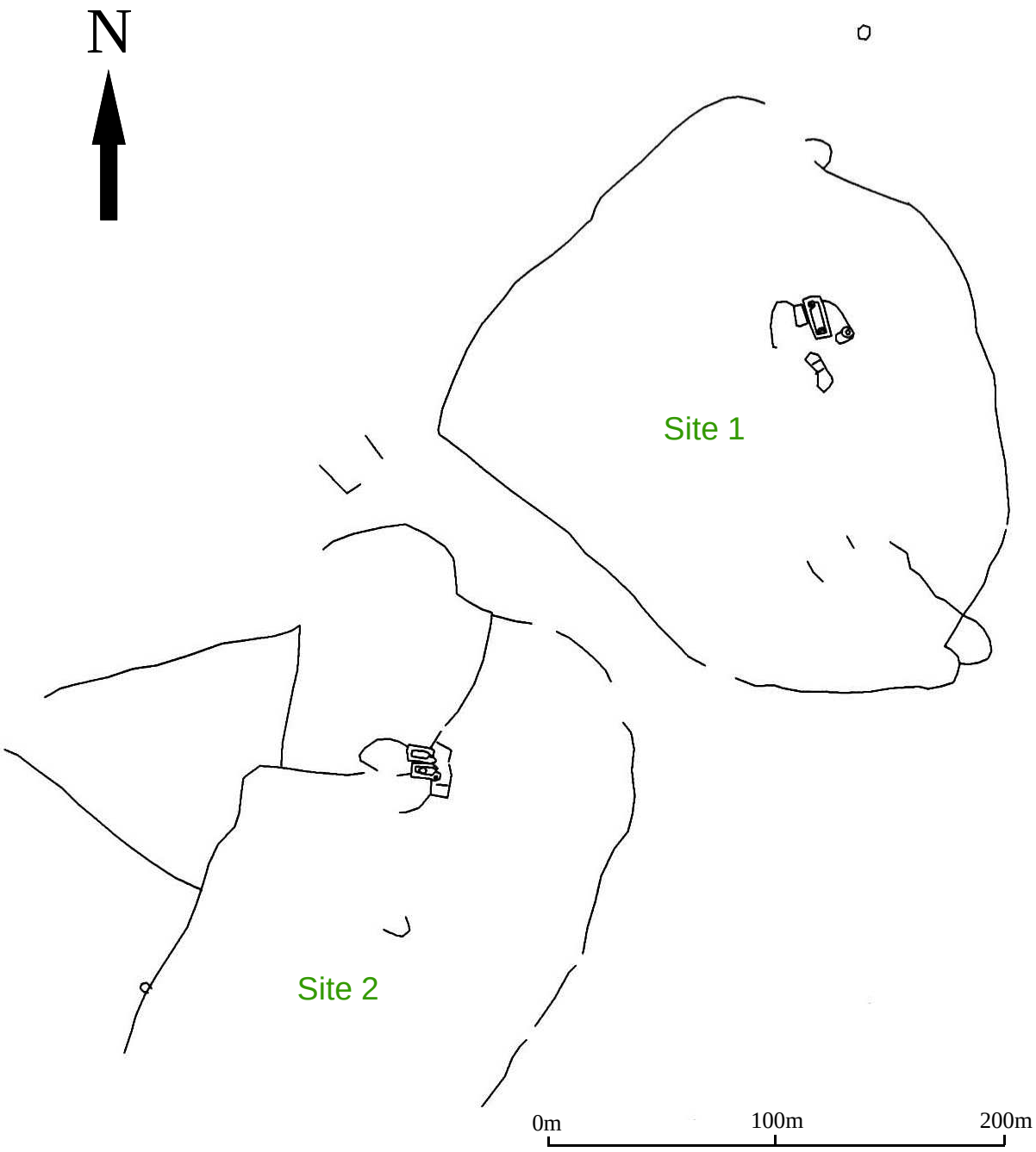


Fig 1: Full topographical survey.

Plate 1: Aerial photograph of the main structures of Site 1.
The red dot marks where samples were taken for radiocarbon dating.

Photo: Arthur Batty

Plate 2: Aerial photograph of the main structures of Site 2.
The red dot marks where samples were taken for radiocarbon dating.

Photo: Arthur Batty

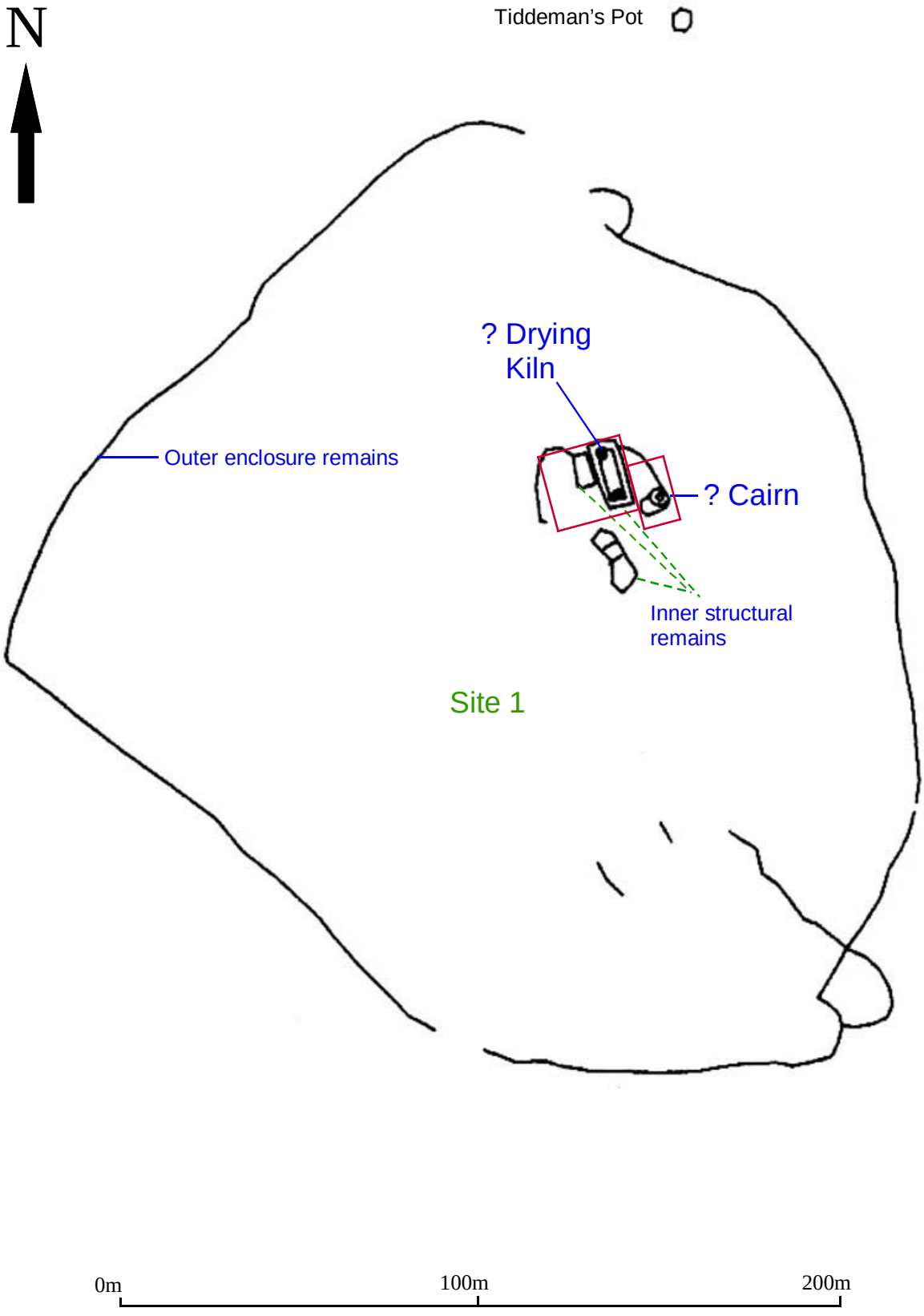


Fig 2: Topographical survey of Site 1. The red boxes indicate areas of geophysical surveys (See Fig 5 and 6).

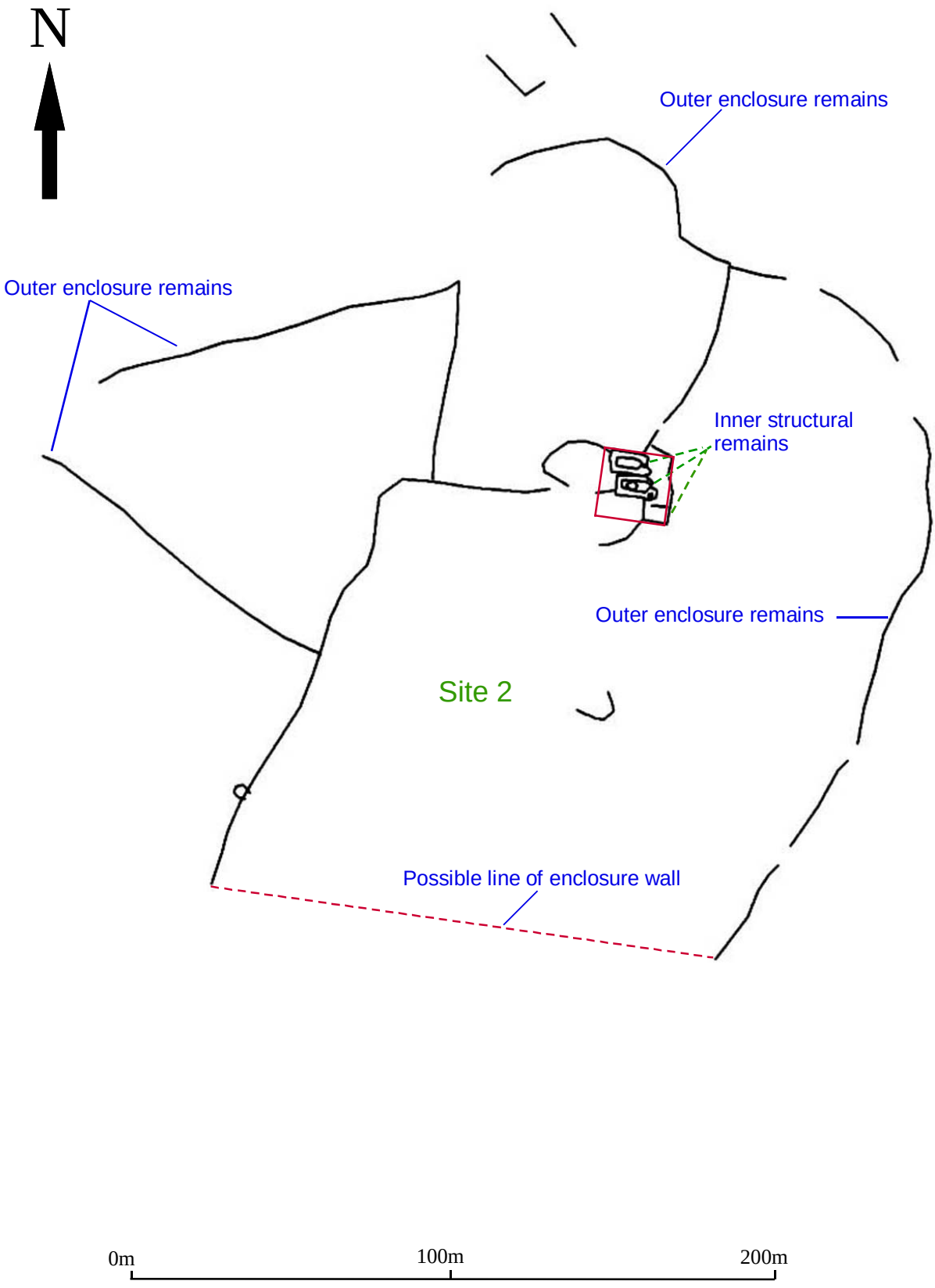
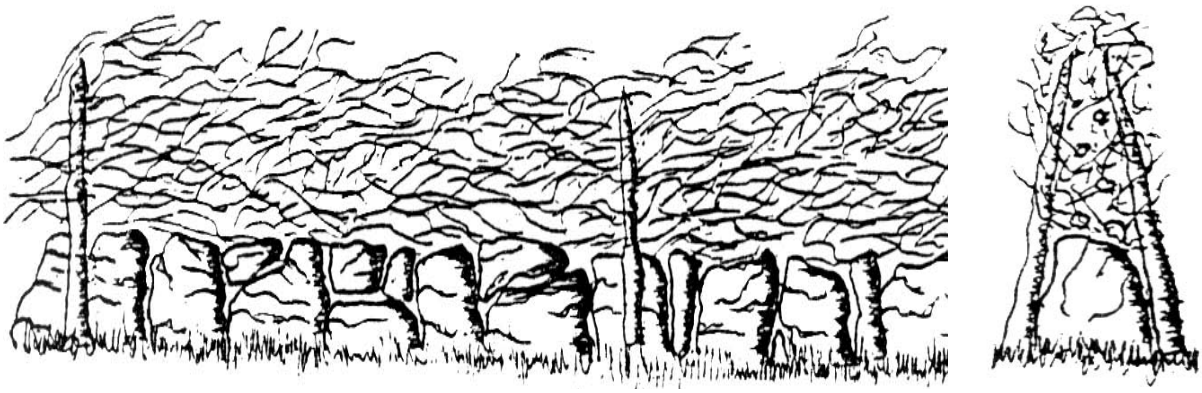
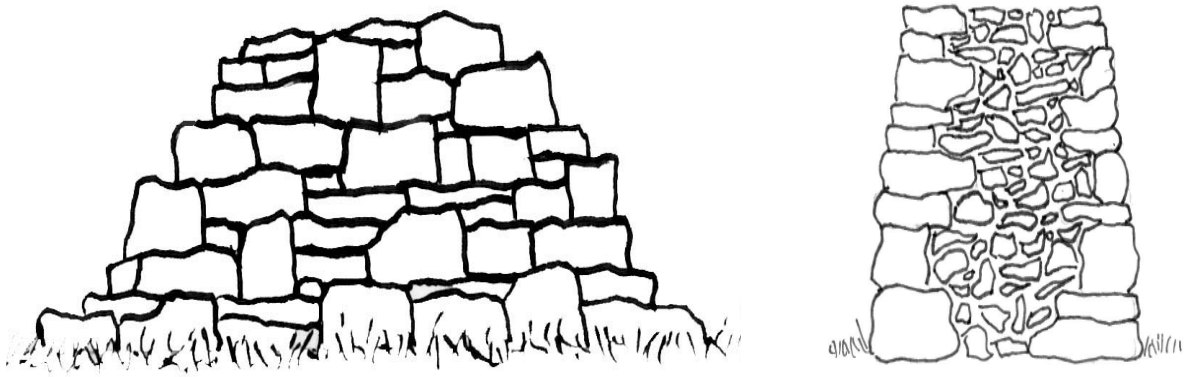


Fig 3: Topographical survey of Site 2 with the surmised southern boundary shown in red where it abutted Trow Gill. The red box indicates the area of the geophysical survey (See Fig 8).



(a) Proposed reconstruction of **enclosure** wall remains showing orthostatic base stones, boughs and branches on top to a height of approximately 2m. The branches are held in place with posts on either side of the orthostats as seen in the cross section to the right. *(Batty, 1997)*



(b) Proposed reconstruction of wall remains relating to **dwellings and other roofed buildings**. These are typical double-faced walls in-filled with stones and/or sods.

Drawn by Arthur Batty

Fig 4: Drawing showing reconstructed wall remains

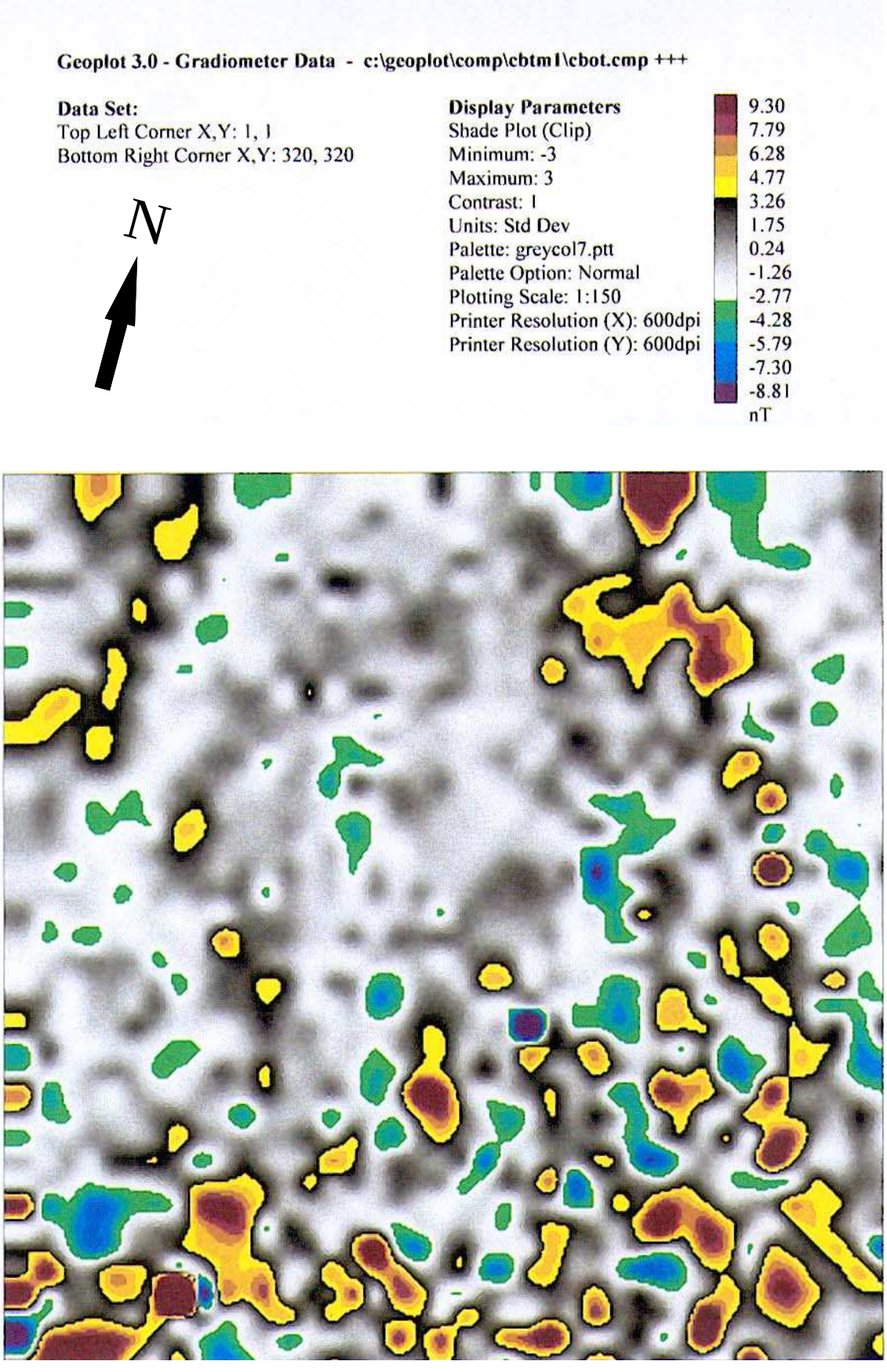


Fig 5: Gradiometer survey of Site 1 (20m x 20m).
The high anomaly at the top right is the area of burning marked (b) on Plate 7.

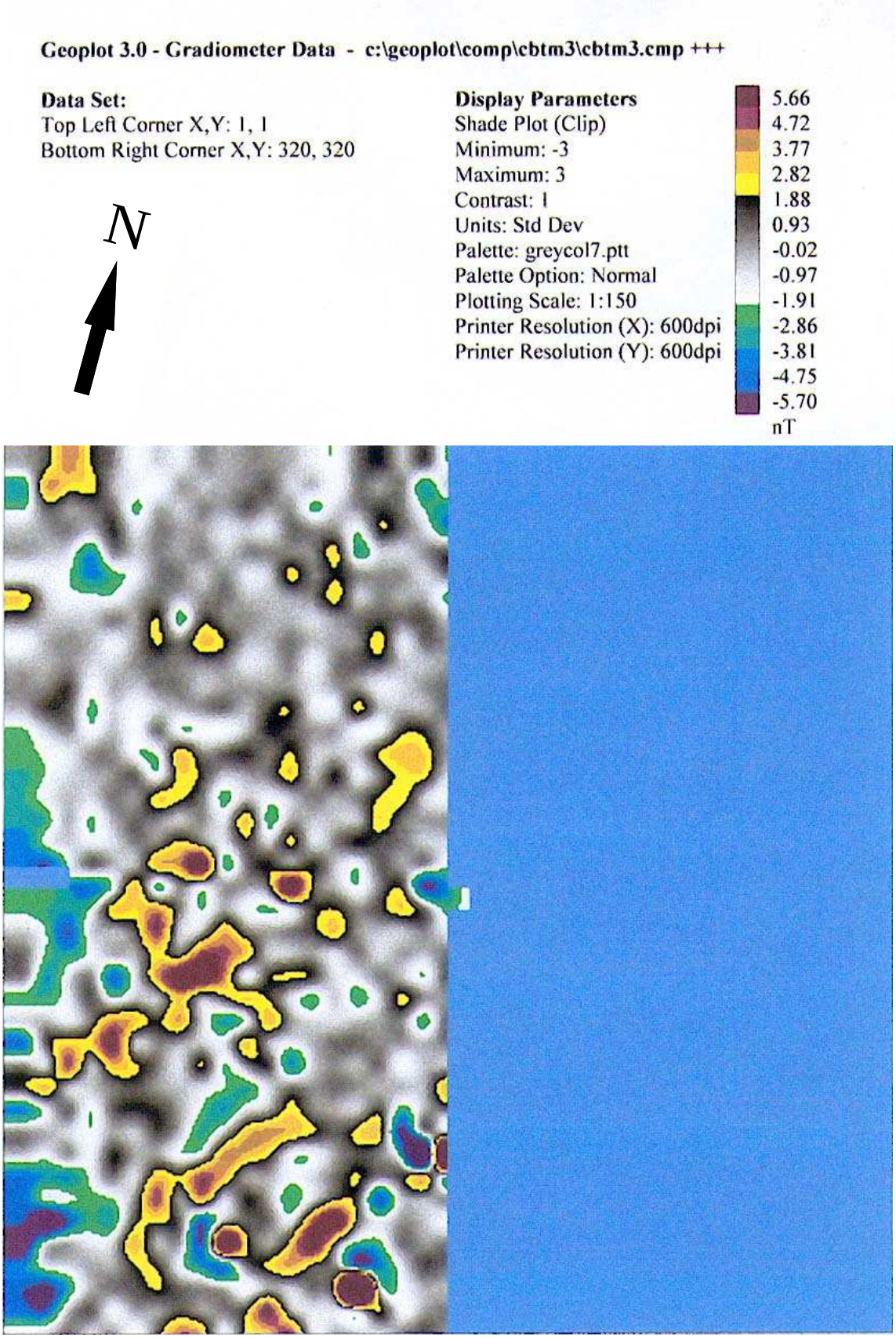


Fig 6: Second gradiometer survey of ? Cairn Site 1 (20m x 10m).

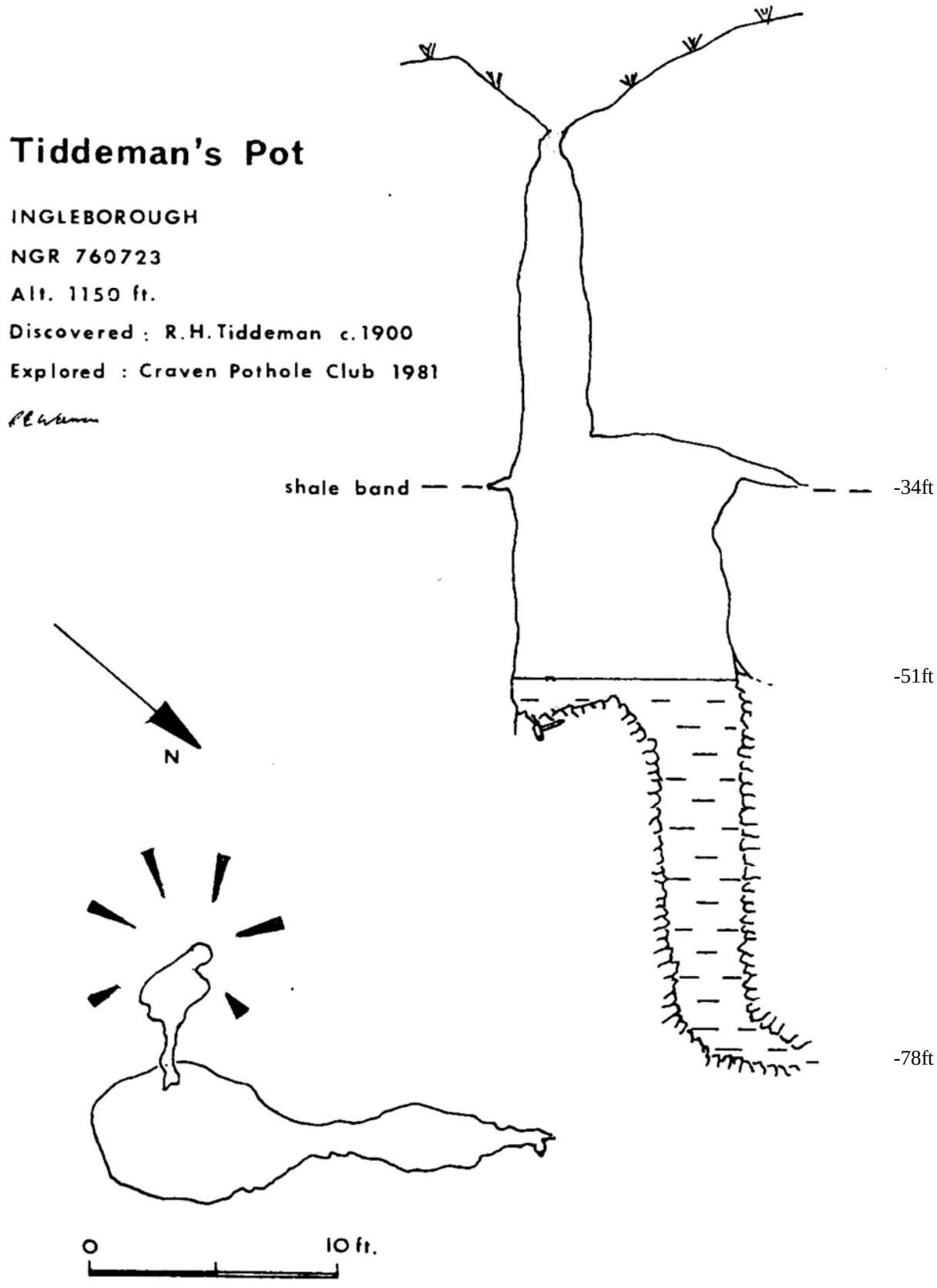


Fig 7: Tiddeman's Pot. This could have been used as a well to supply water to Site 1.
Drawn by S (?) E. Warren

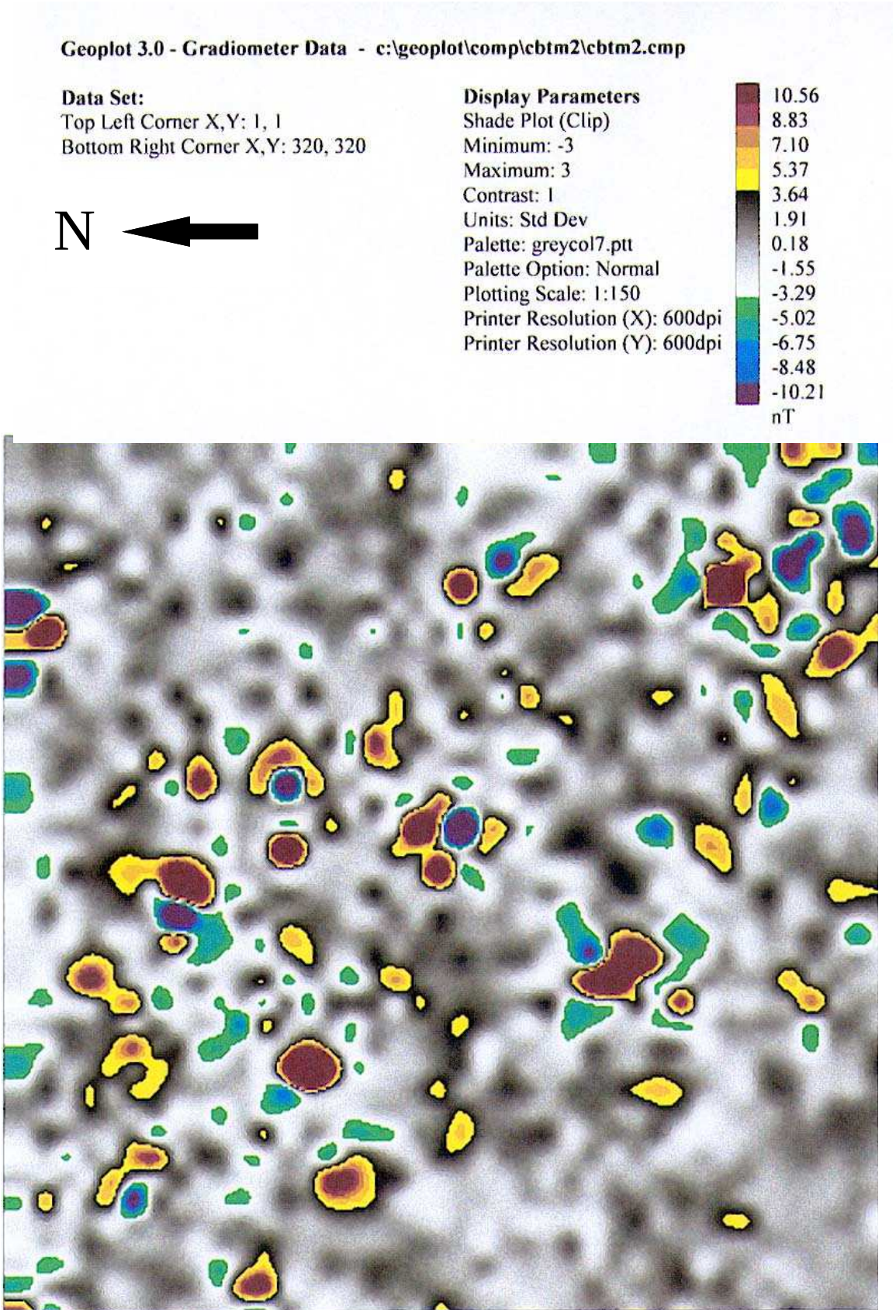


Fig 8: Gradiometer survey of Site 2 (20m x 20m).

Plate 3: Left - sword blade. Right - spoon auger

Calibration Plot

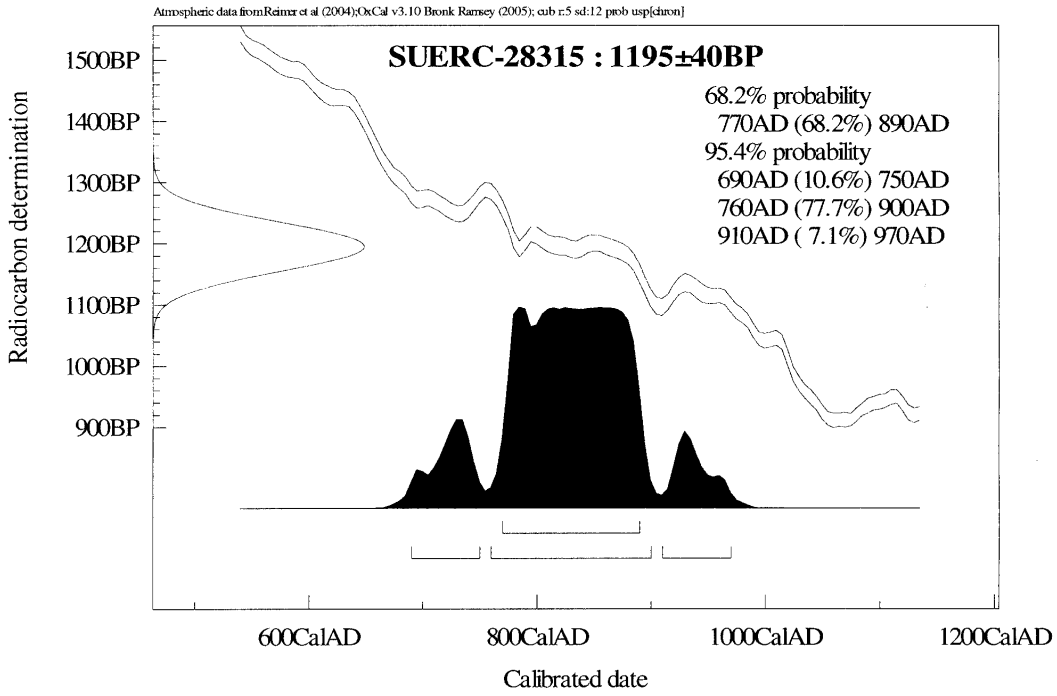


Fig 9: Radiocarbon date of charcoal sample taken from Site 1.

Calibration Plot

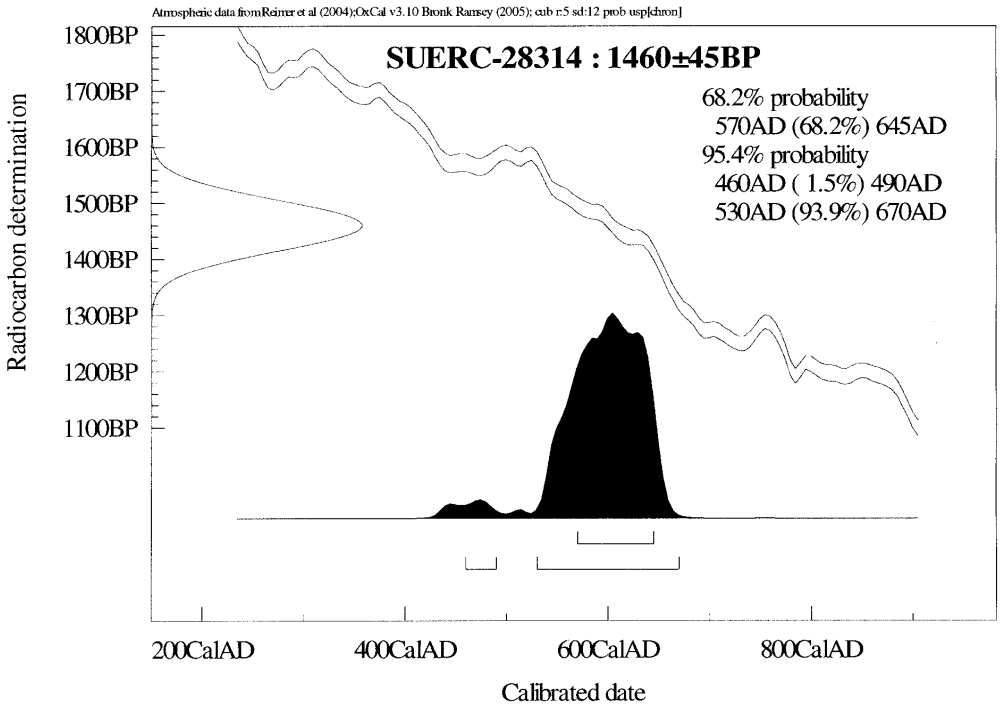


Fig 10: Radiocarbon date of charcoal sample taken from Site 2.

Plate 4: X-ray of sword showing pattern welding at the point

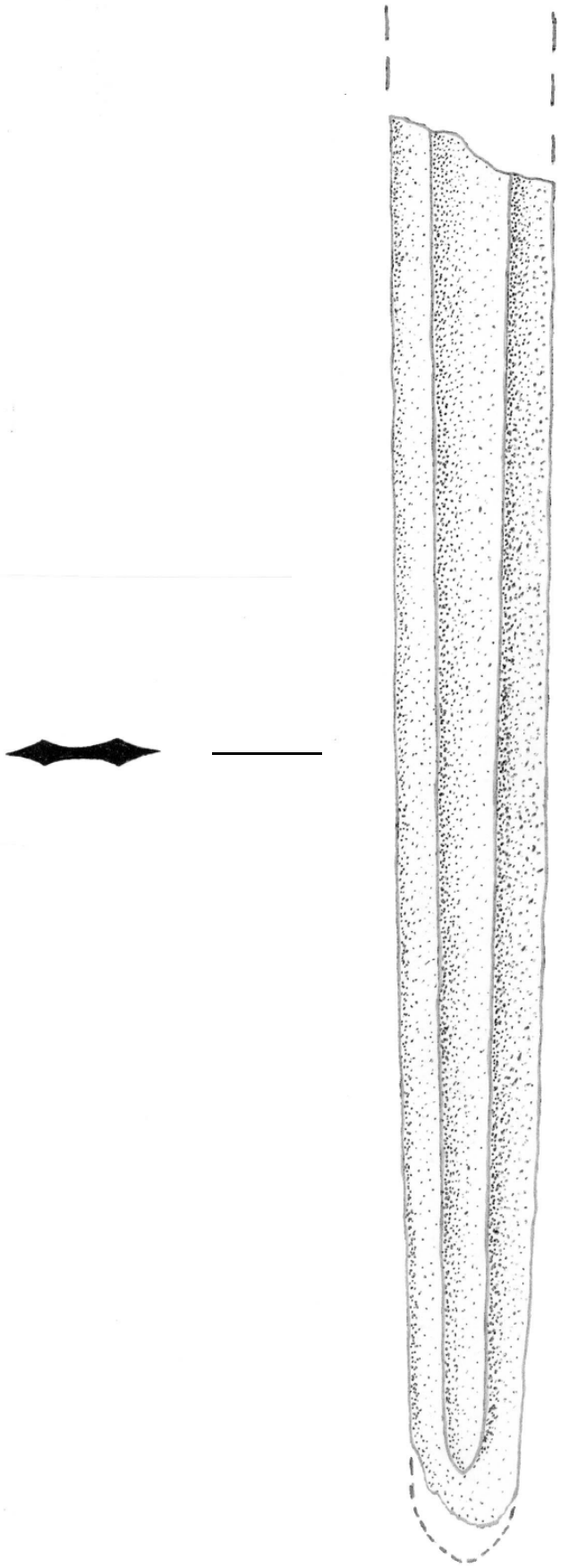


Fig 11: Reconstruction drawing of sword. *Drawn by Arthur Batty.*

Plate 5: This photograph shows the fullering on the sword blade
Photo: Arthur Batty

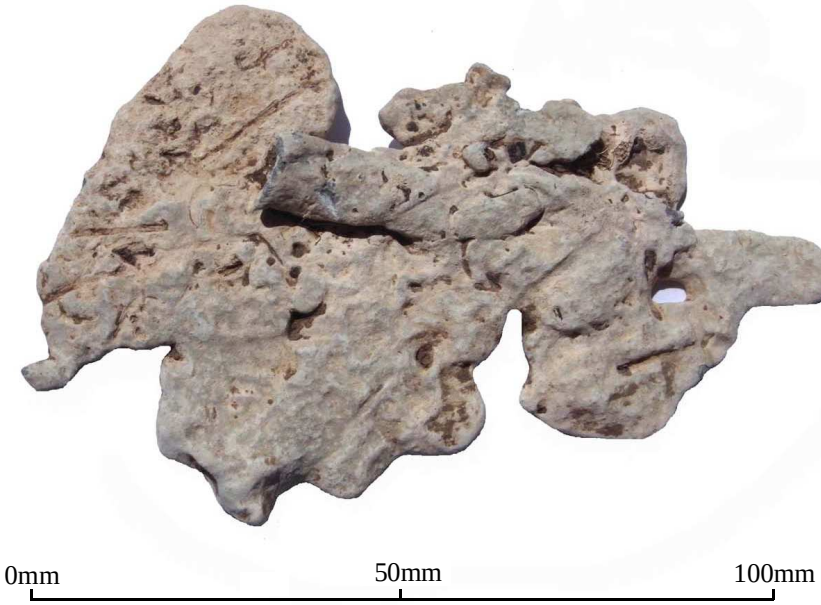


Plate 6: Lead waste from Site 2.
Photo: Arthur Batty

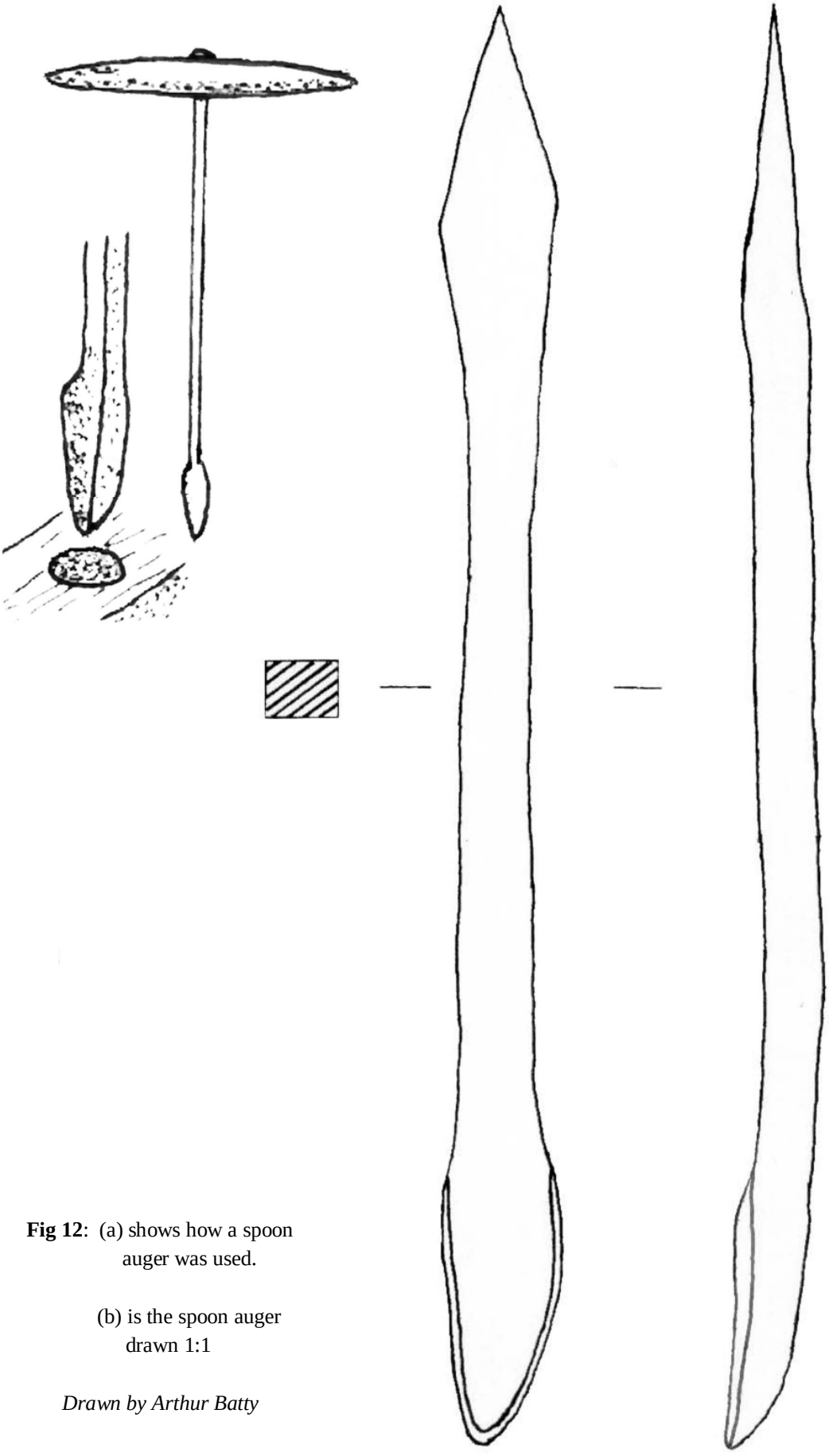


Fig 12: (a) shows how a spoon auger was used.

(b) is the spoon auger drawn 1:1

Drawn by Arthur Batty

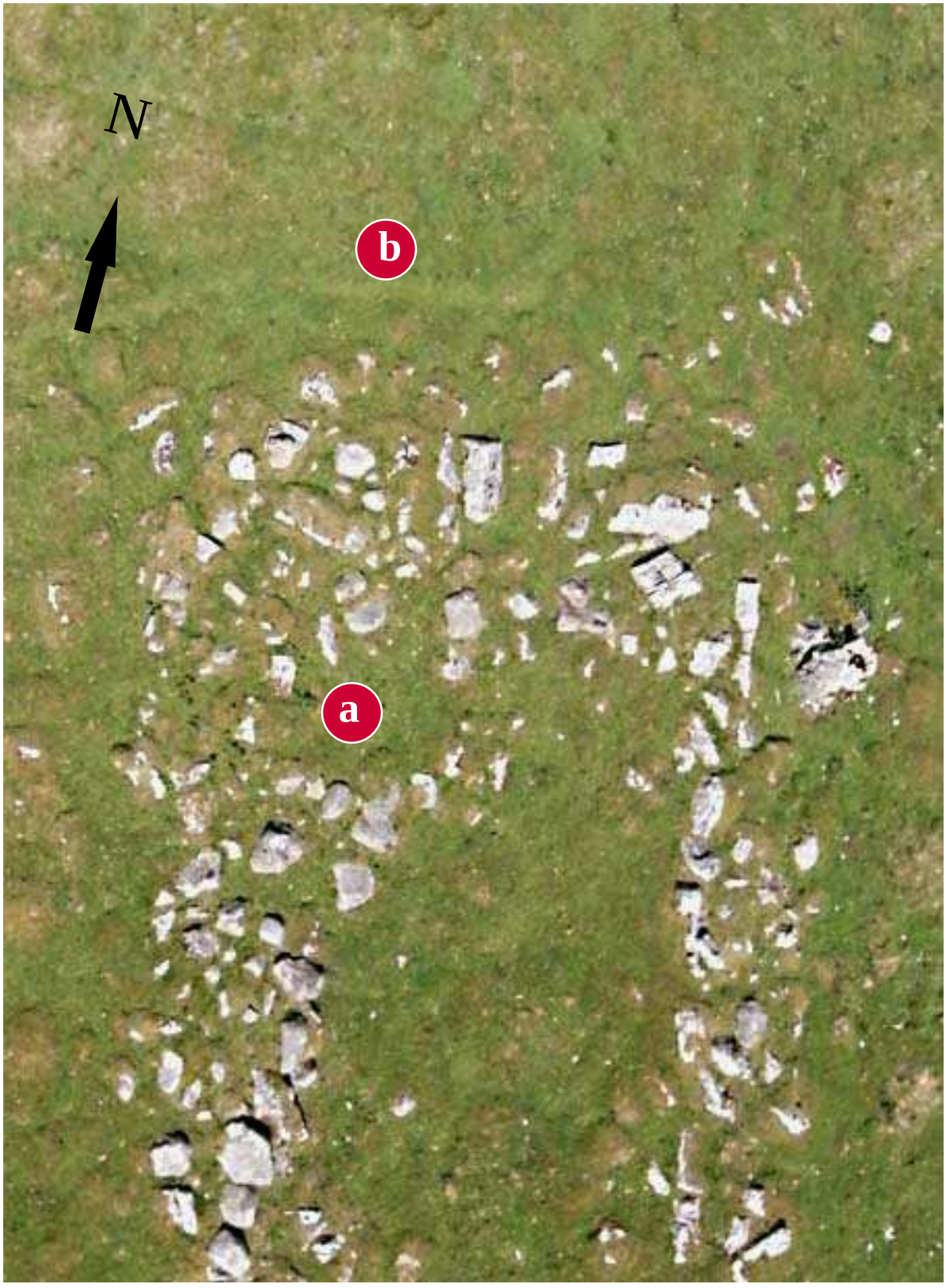
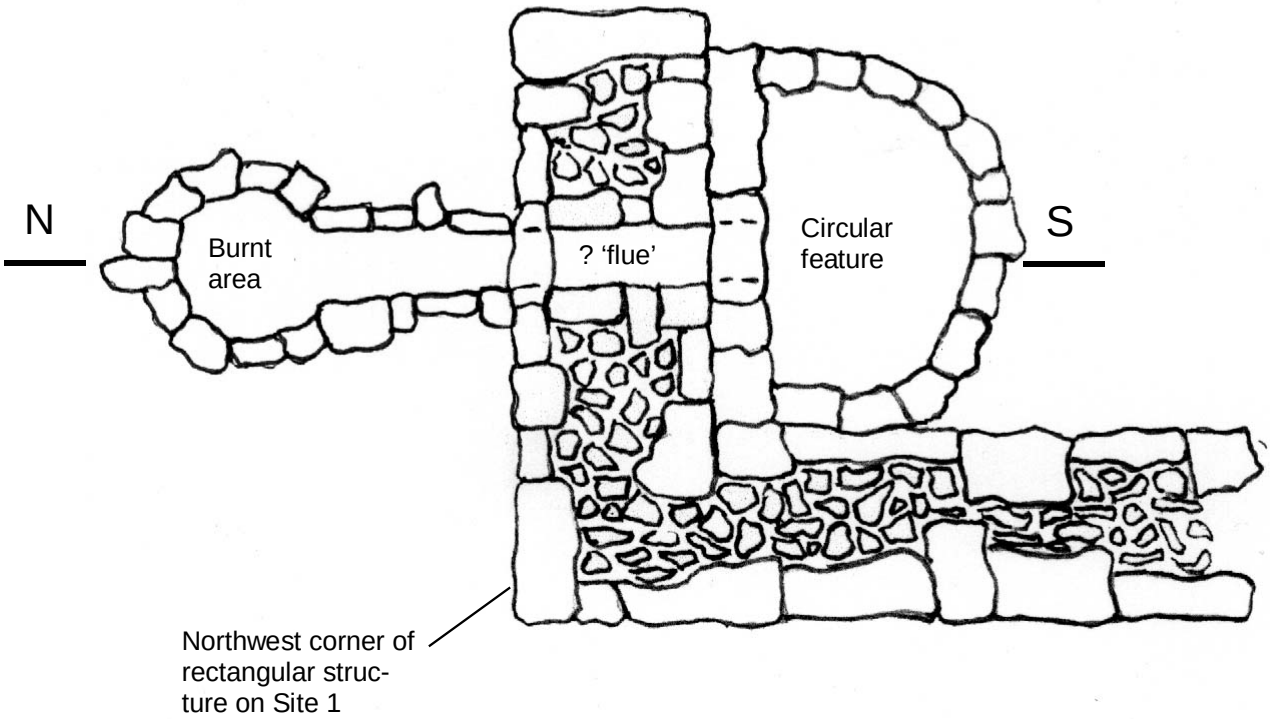


Plate 7: Site 1- An aerial photograph of Site 1 enlarged and showing northern end of larger rectangular structure.

(a) circular feature

(b) area of burning identified by magnetometer survey (shown in Fig 5)

Photo: Arthur Batty



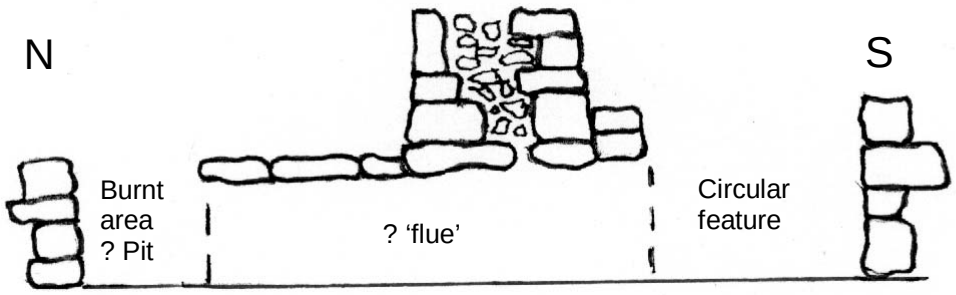


Fig 13: (Not drawn to scale)

(a) Plan of proposed crop-drying kiln.

(b) Elevation drawing

Drawn by Arthur Batty