

DORNOCH HERITAGE SOCIETY.

NOTES ON SYDERA FARM GRAVEL QUARRY

DIG : WINTER 1987-1988.

IRON-AGE ROUND-HOUSE CUM SOUTERRAIN.

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[Feb. 1983]

## THE SYDERA - or "CYDERHALL" - FARM DIG.

In September, 1987, work commenced on the North Approach road to the Dornoch Firth Road Bridge. Messrs Miller Construction, and "K.P.C." (Kinross Plant Co.?) contractors with Messrs Crouch & Hogg as consultant civil engineers handled the job. The following notes are simply a layman's observations on the professionally organised dig of the souterrain of Sydera Farm, Dornoch and the opinions mentioned are almost wholly the recounted versions of the archaeologists performing the dig.

An entire field of Sydera Farm (Mr. Gordon Munro), occupying the westernmost point of a raised plateau of fluvo-glacial sandy-gravel detritus, landward of Cuthill Farm on the Meikleferry Road, near Dornoch, was earmarked as a quarry-site for infill and embanking of the approach road, and for crushed stone for concrete mixing for structural building, on land belonging to Mr Derek Holt, Skibo Castle. Of predominantly yellowish-orange sand and water-rounded stones, there was found at the western end of this thirty-to-forty foot high plateau, a fair deposit of very white, finely grained sand, of the sort of quality described historically as likely to have been used in the making of glass for the original windows of Dornoch Cathedral. As the service-road approach to the quarry site was being bulldozed out of the western tip of the plateau, very distinct alternating layers of fine sand and coarsely graded deposits, or varves, indicating the summer and winter deposition of water-borne glacial detritus as the formative process of the land-structure of the site.

This end of the plateau had been worked into the shape of a wide, pointed, promontary by a long-abandoned meander of the Evelix River, on its north side, rendering the site strategically ideal for a primitive settlement on account of its high elevation, its command of an all-round long-distance view, and the protective slopes, falling away steeply, on three sides of the edge of the gravel escarpment.

The loam surface-soil, about a foot deep - plus or minus six inches - indeed, in places, even less, was skimmed off by earth-moving machines, and dumped around the periphery of the site for the ultimate re-surfacing of the abandoned quarry upon completion of the work.

In the north-east corner of the quarry, nearest to Sydera Farm, in the course of excavation below the removed top-soil, towards the end of November, Mr Kelly of Fife, the driver of a caterpillar excavator, noticed a large quantity of sea-shells and black, carbonated ground, along with many large, roughly hewn, non-native sandstone slabs. Realising a possible archaeological significance, he ceased working the area and reported it to the site-manager, who notified the Highland Regional Archaeologist in Inverness - Mr Robert Gourlay. Mr Gourlay visited and notified the Scottish Development Department in Edinburgh, and Mr Patrick Ashmore, the Chief Inspector of Ancient Monuments in Scotland in turn inspected the site, authorising a formal "dig", using available members of Dornoch Heritage Society as local labour, under the direction of a professional archaeologist, Mr Robert Pollok. Messrs Miller Construction kindly funded Mr Pollok's petrol requirements for the dig.

The site was defined by three short wooden posts and contractor's coloured tape, and

quarrying activities were temporarily withdrawn in the neighbourhood, pending completion of the dig. Arbitrarily, that portion between the west post and the central post was regarded, unofficially, as No 1 site, while the portion between the central, and eastern, posts was called No 2 site for convenience of relating finds.

Initial feeling that the site probably represented a collapsed souterrain was quickly borne out by early digging, and the remnants of a circular stone wall with post-holes outside it identified the usual concomitant hut-circle. A pit in the ground inside the hut circle containing a fair quantity of carbonised barley grains, and small portions of burnt wood, and the black carbonated ground all over the site — in two distinct layers about four to six inches thick, and probably eighteen to twenty-four inches apart, suggested that there had been two huts on the site, both burned down most likely by marauding tribes, at various times, and that rebuilding on the same site had followed the raking-over of the first site, or primary base level, with the local yellowish-orange sand-gravel deposits.

No 2 site, held the area of the eastern portion of the souterrain, not yet dug, and further away, a large pit in the ground filled with a homogeneous carbonated muck of layered, greasy-clay-like material of varying shades of grey and black. After much thought this was ultimately reckoned to be a latrine pit into which, after use, burning embers of fire had been thrown from time to time to diminish the stench, and perhaps, to keep down the bluebottles! The surrounding ground had been excavated away leaving this mass of black-looking soil poised prominently in the air — see photos!

The whole dig was particularly sterile in findings of manufactured artifacts: two or three small shards of pottery, extremely coarse and unglazed, one broken flint arrowhead and one or two odd bits of small bone were the sum total of finds throughout the dig, while certain anomalous features obtruded, such as the floor of the second building on this site was not normal to the earth's radius, but faded gently into the ground towards the north aspect.

For interest the following description of souterrains, or Earth Houses was excerpted from MacPhail; I.M.M., A History of Scotland for Schools - Book I - from the Earliest Times to 1747: 1954 (Alva): pp 20-21:—

In Strathmore, Aberdeenshire, and in a few places in Fife and the Lothians there are to be found underground dwellings which used to be called "Picts' Houses", "Earth Houses", or "Weems", but are more usually today called souterrains. Similar souterrains are known also in Cornwall and France. In the nineteenth century and earlier people used to tell stories, old wives' tales, about the Picts, a small race of men, living underground in such earth-houses. It has even been suggested that our folk-tales about "Brownies" and similar small creatures go back to the days of the Picts. Today most archaeologists are convinced that they were merely underground cellars or stores, under surface timber-built houses, but that they may sometimes have been used as refuges. Most of them are on good farm land, and their discovery has often been due to the farmers plough striking a stone at the entrance to the passage leading underground, or to the horse or plough sinking into the passage itself. One of these souterrains, near Crichton, in Midlothian, has been built with some stones taken from a Roman fort.

The early digging was concentrated on No 1 site, and was aimed at establishing the souterrain walls, and defining the top layer—or Secondary Base level—and mapping it. During this the vertical faces already dug away by the quarry excavator, were cleaned down by trowelling, when the area where the barley grains were found was identified as a circular grain-storage pit, or kiln, and two post-holes were defined in vertical section, one an exceedingly large post-hole, thought probably to have been a main, central, roof-bearing pole. The post-stump remnants in these holes had burned away to charcoal or ash, and recurrent rain storms had drained charcoal-impregnated surface run-off water into them, depositing black mud in layers like onion-skins as it dried-out, evaporated, or seeped away into the porous gravel.

The excavator had reached far back in the central part of No 1 site, quickly displayed the sandstone blocks of souterrain construction, and promptly desisted. In the right-hand, or eastern, rear corner of this excavator-cut there was found a profusion of sea-shells, obviously a shell-midden composed almost entirely of cockle shells with a few periwinkle shells thrown in: no limpet, or other shells, for there are no rocks on the coast-line locally. No 1 site terminated abruptly at its east end in a bolus of infill blocking off the souterrain with collapsed south-wall retaining blocks, random rubble, and another shell-midden. Obviously upon collapse of the souterrain they just pitched their rubbish into the subsidence. The excavator detritus was removed, and in so doing, with a little gentle digging, the north wall members of the souterrain came into sight. These were defined, and the mass of pre-historic infill of the souterrain was dressed down vertically by gentle trowelling, leaving the obstructing mass to be dealt with later. It showed several sagging layers, concavity upwards, of this improvised shell midden, while on the extreme right hand side (south side) one or two big stones of the hidden south wall of the souterrain protruded. Further gentle scraping revealed the initially considered bottom of the souterrain to have been a pseudo-floor, and a final floor level was defined lower down at a distance of marginally over two metres below the removed top-soil. It was left at this state for further digging.

Meanwhile the Secondary Base level of No 1 site had been trowelled clean, and meticulously mapped, working from a nominal string-marked base-line at the back of the dig with a metre-square wooden frame divided into fifths by a reticulum of strings, whereby every stone, artefact or feature could be accurately scaled and plotted, reduced  $1/20^{\text{th}}$  for the working site-plan. The method was to dig layer by layer, mapping on serial charts to get an ultimate three-dimensional picture of the site.

Before commencing excavation for the Secondary Base Line, several charred and burnt wooden members were noted and photographed— one pair set at accurate right angles resembled the lintel and post of a possible doorway. Then began the careful trowelling downwards from the Secondary (upper) Base line, inch by inch, hunting for detail and possible artefacts. This gruelling and prolonged crouching or kneeling work, in bitter winds and keen frost was done mostly by Miss Mary Butler and Mr Robert Pollak, the archaeologists.

Soon more and more charred branches, in random scatter, criss-crossed and

intertwined without seeming order were discovered below the Second Base line, and most profusely immediately north of the great post-hole — the closely parallel arrangement here of some of these boughs suggested the possibility of a wooden floor of straightish boughs that had been burned away.

In the furthest west-end of the dig, where Mr Robert Pollok is seen working in photo No 87/29/17-17A, there were indications of a carbonated ground pathway leading northwards. As this was dug, it was referred to, for identification, as "The Gully". Only a few burnt branches and a post-hole with the charred residual stump of its post were found. Much puddle-riddling of the spoil of this part of the dig showed nothing but stones and chips of charred wood.

In No 2 site some work had been done on the expected extension eastwards of the souterrain, and a rough line of coarsely hewn stones suggested a possible terminal wall. However, this was shown not to be so when this end of the souterrain was relieved of its caved-in material. Unfortunately, owing to drying-out of the subsoil and the trickling away of sand and small gravel stones the initially exposed north wall became unsafe, and had to be dismantled. The south wall was nicely defined for a length of 8'9" (2670 mm) eastwards from the floor-pit, and some 5'10" (1780 mm) more of the north wall appeared. The floor on the east side of the floor-pit rose at an angle towards the surface, and the side walls funnelled in towards each other from a breadth of 5'11" (1800 mm) at the floor-pit to 4'3" (1300 mm) at the upper, eastern, end. The compass bearing along the centre-line of entrance and body of the souterrain was 310°. It was obvious that this had been the entrance to the souterrain, and that the floor-pit, where it would have levelled-out could possibly have been a booby-trap for raiders and the uninvited, and not for the storage of grain as previously thought.

Some work on the latrine site by Mr James Bell was unproductive, and invidious as the greasy clay-like material quickly clogged-up the mesh of the sieve and it became impossible to continue work.

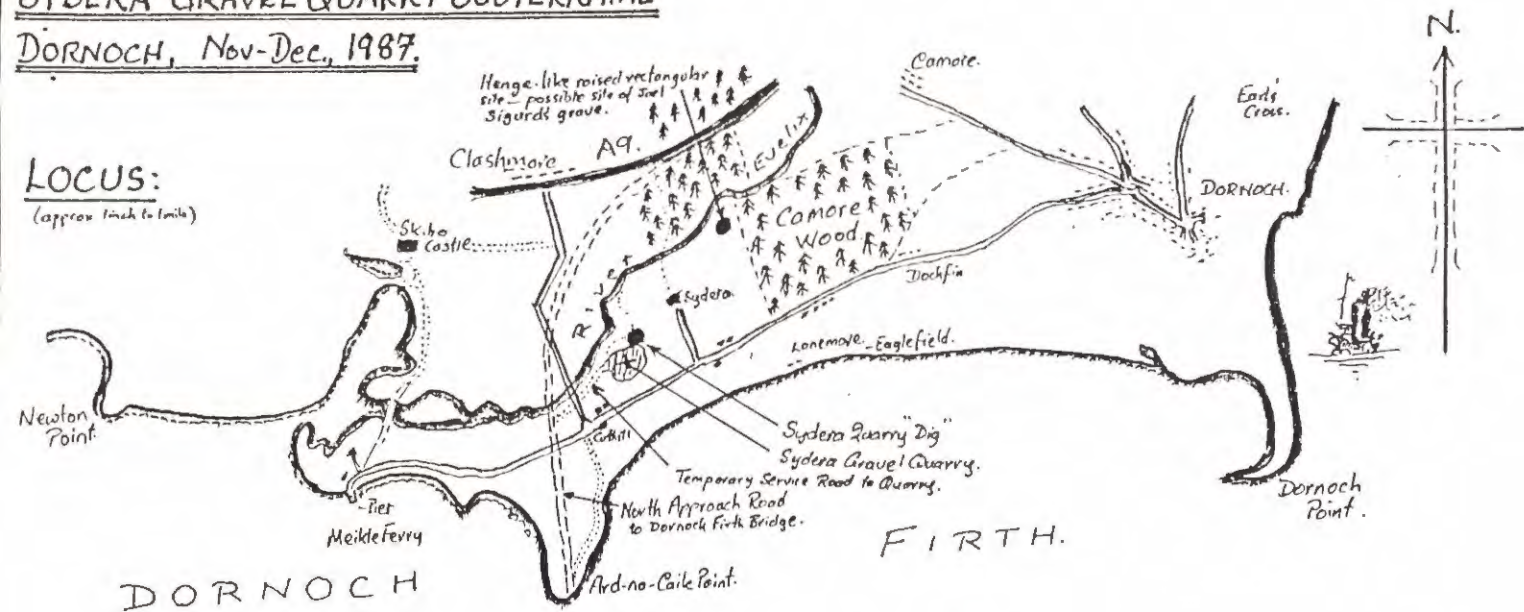
To sum-up, here we have a probable early Iron Age settlement of agriculturalists and mixed farmers of approximately 5<sup>th</sup> Century, B.C. Several areas of carbonated earth and shell middens were uprooted by the quarry excavator in various parts of the quarry, indicating the area had been an organised settlement. The fairly flat plateau was both naturally fortified, and of good arable land, within half a mile of Dornoch Firth, and a hundred yards from a good trout river — and thus an ideal site for such an Iron Age Celtic agricultural settlement — which could have been any time between 500 B.C. or so until, perhaps, a couple of hundred years A.D. The site is not typical, showing several anomalies from the traditional Iron Age dwelling. It had been sacked and burnt-out at least twice — possibly more often — and the very early collapse of the souterrain might have been deliberate to protect the hiding inmates from marauders — who could even have been as late as the early Viking invasions. The almost total lack of manufactured articles fits in with the general findings of this era, the people being less well-off, so far away from their culturally more advanced continental relations.

# SYDERA GRAVEL QUARRY SOUTERRAINE

DORNOCH, Nov-Dec, 1987.

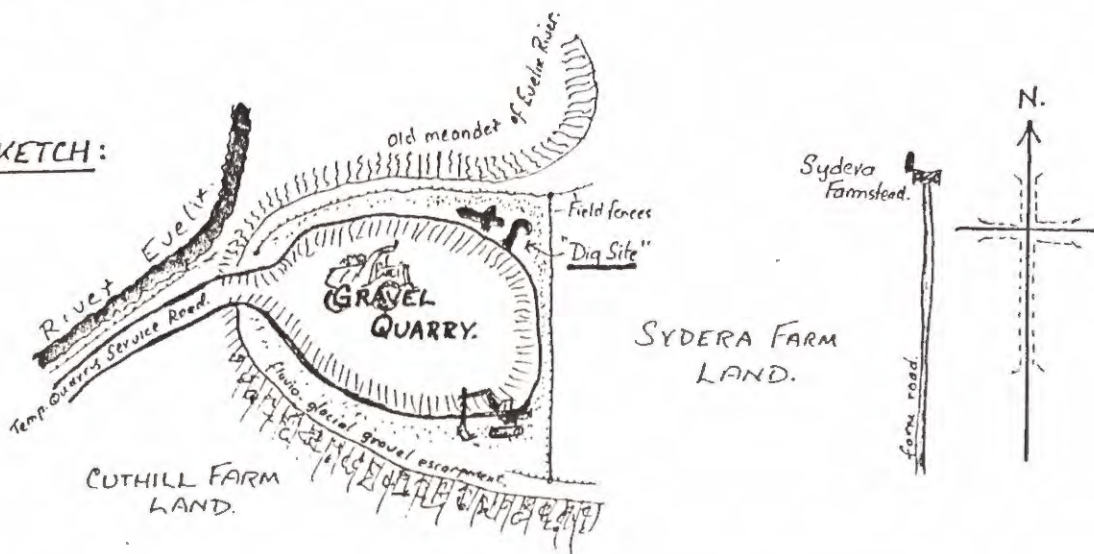
## LOCUS:

(approx 1 inch to 1 mile)



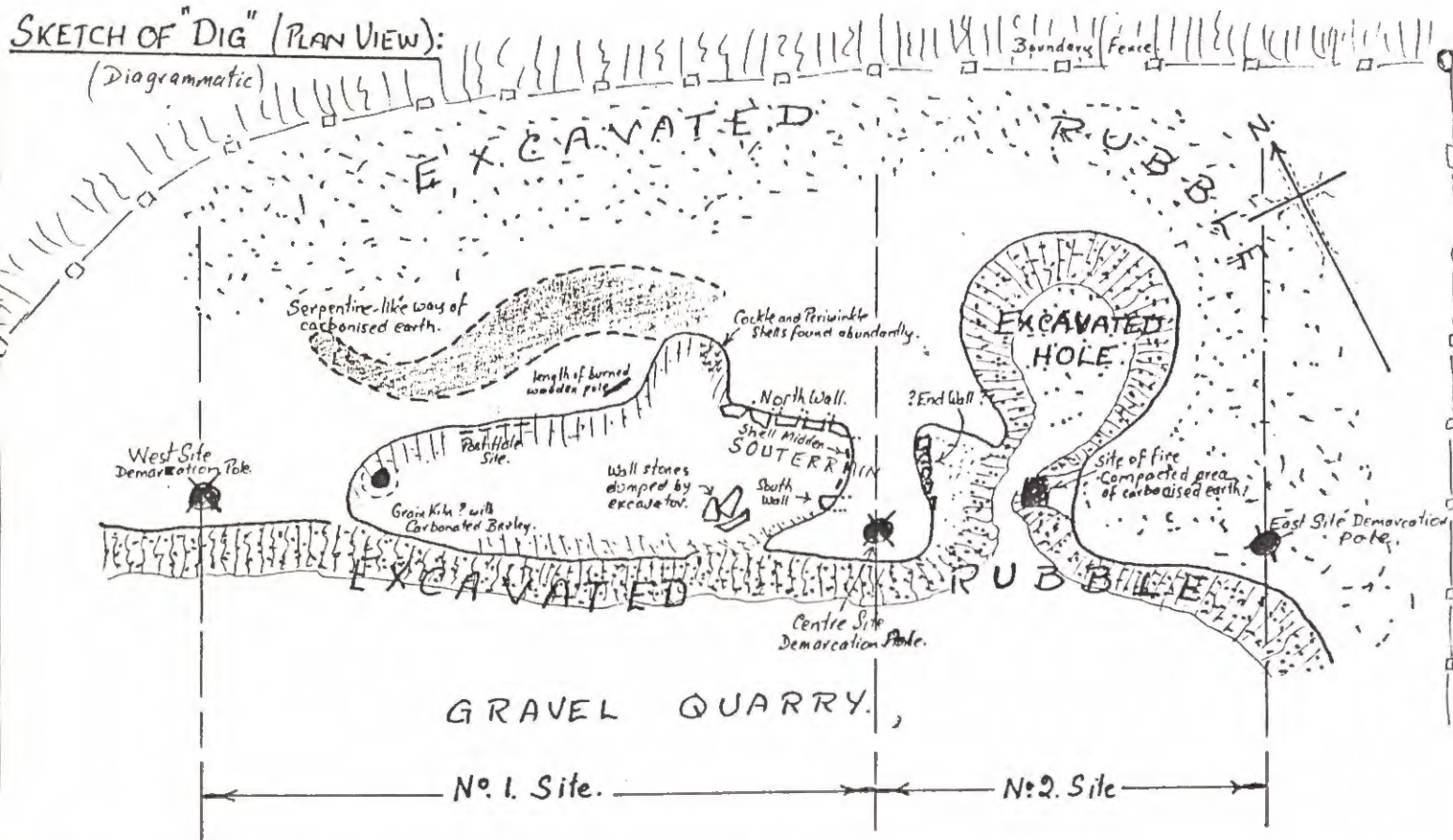
## SITE IDENTIFICATION SKETCH:

(Diagrammatic)

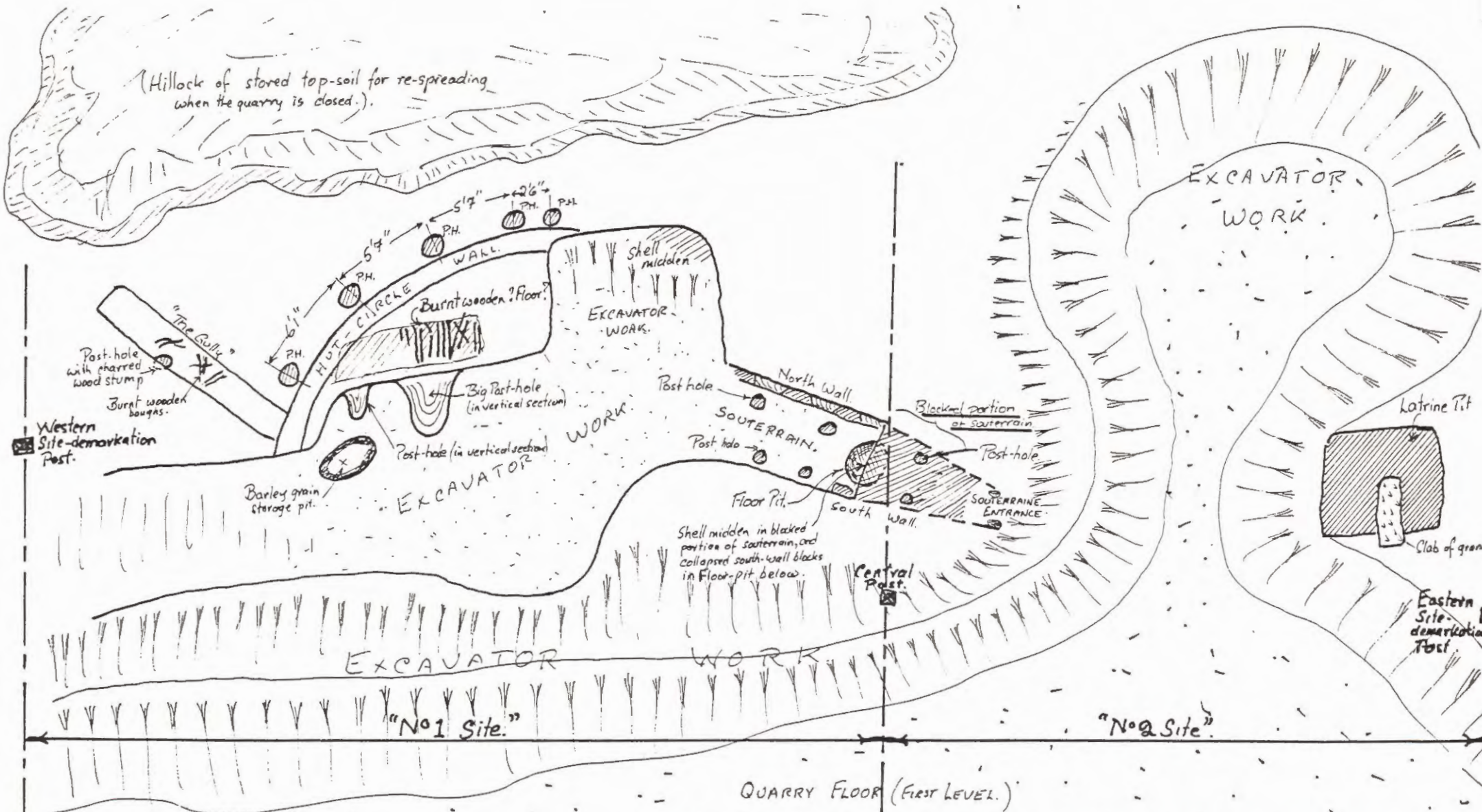


## SKETCH OF "DIG" (PLAN VIEW):

(Diagrammatic)



Note: Three Site Demarcation Poles were driven to identify the area of the 'Dig'. Arbitrarily these were used by the Society to divide the site into two portions for description sake. The West site (No. 1 site) was the major site - first dug, and the East Site was regarded as No. 2 site, of less concentrated interest.

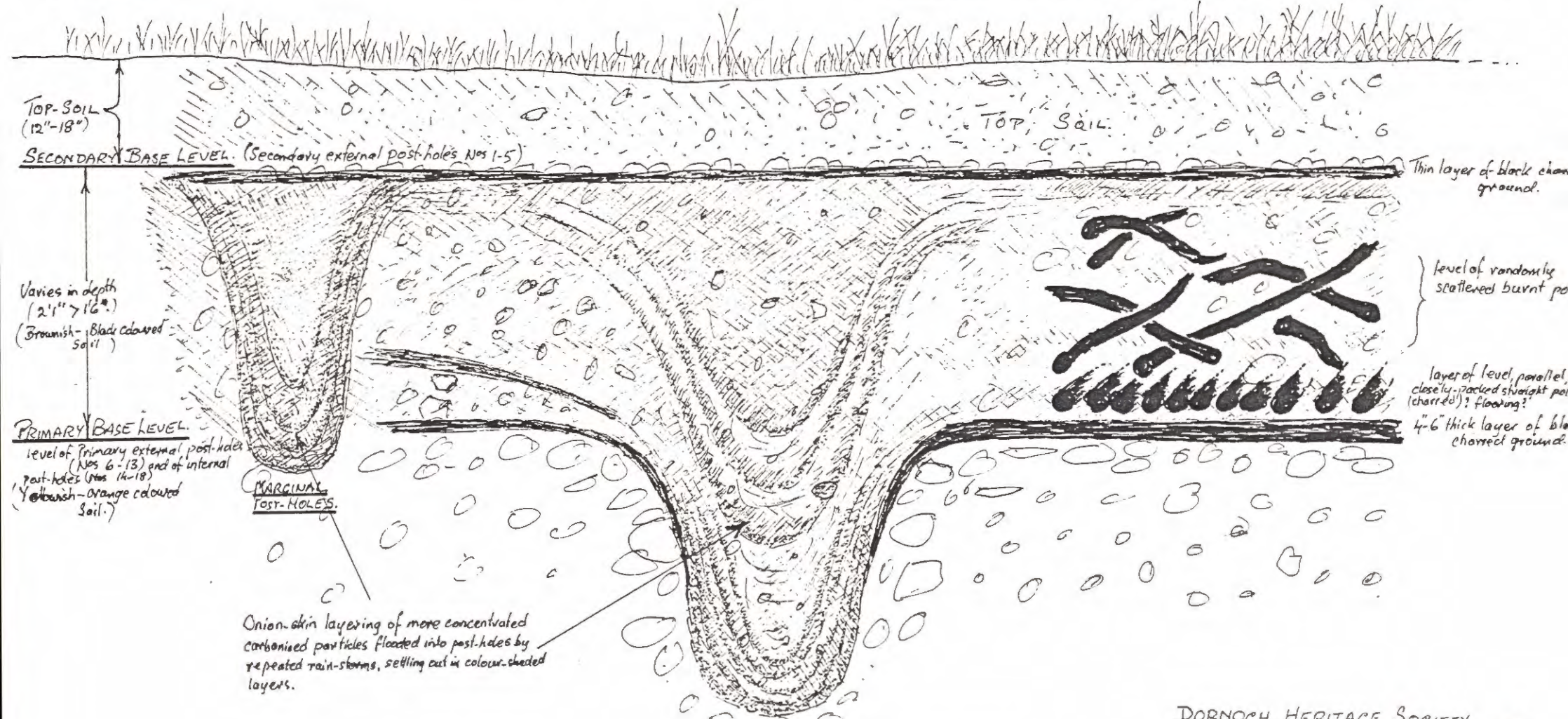


Rough, diagrammatic plan of site as at early January, 1988, before the blocked entrance of the souterrain had been cleared, to indicate positions of main features. Two of the post-holes have been shown as seen in a vertical section—otherwise the rest is in plan view.

# COMPOSITE SECTION THROUGH DWELLING SITE.

To show stratigraphical relationships of finds, and palimpsestism of dwellings

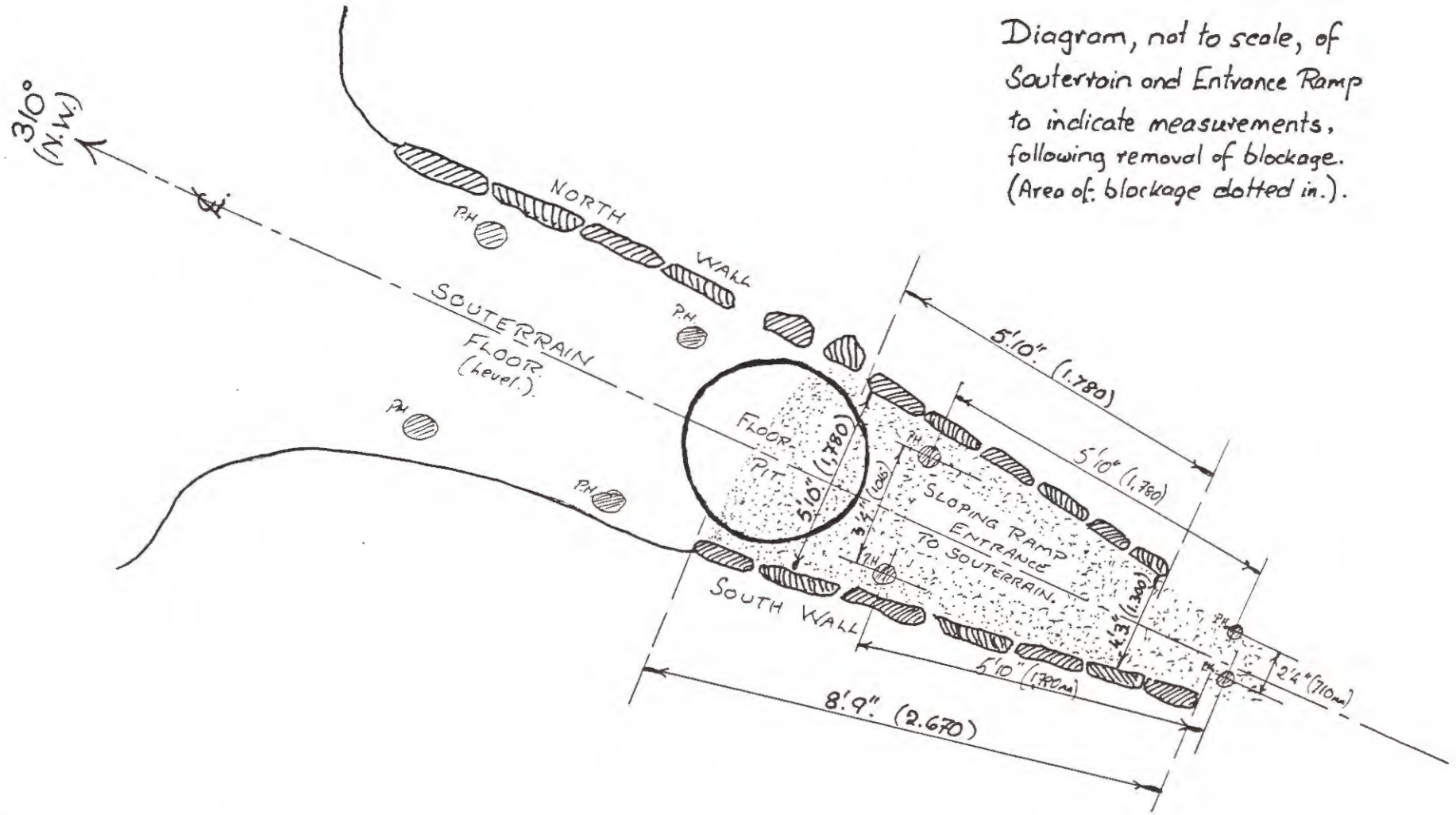
The interpretation is of two—possibly more—Iron Age circular dwellings of stone and soil walls, and wooden roof covered with wattle, heather, turves, reeds, etc., built on the same site from the burning of the previous ones. Of great interest is the tightly packed level layer of burnt parallel poles that seem to have formed a flooring to the earlier house, just above the Primary Base Level.



Onion-skin layering of more concentrated carbonised particles flooded into post-holes by repeated rain-storms, settling out in colour-checked layers.

THE BIG POST-HOLE (probable main roof beam).



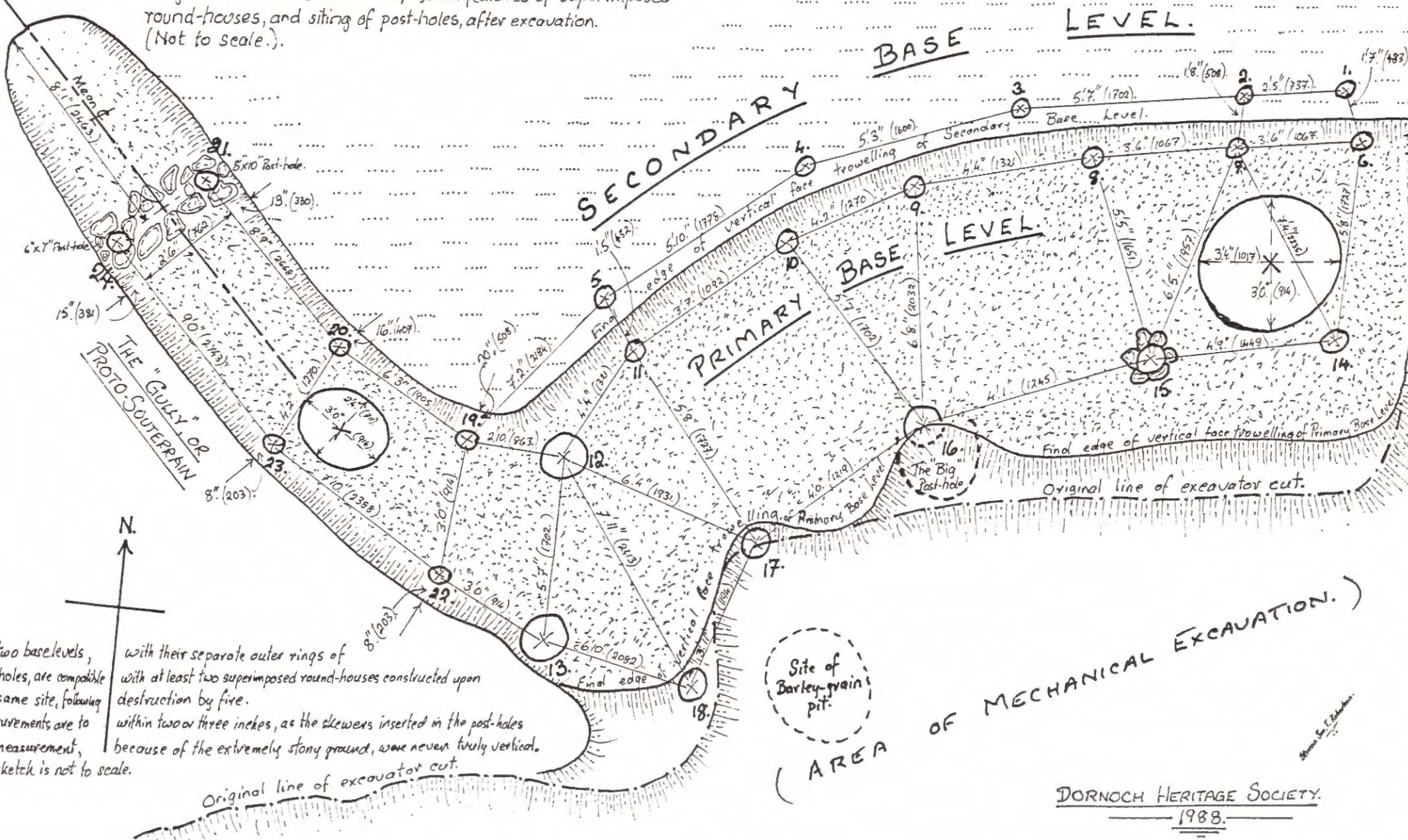


Diagram, not to scale, of Souterrain and Entrance Ramp to indicate measurements, following removal of blockage. (Area of blockage dotted in.)

Bearing: 320 deg.

# SYDERA FARM GRAVEL QUARRY DIG, DORNOCH.

Diagrammatic Sketch to show main physical features of superimposed round-houses, and siting of post-holes, after excavation.  
(Not to scale.)



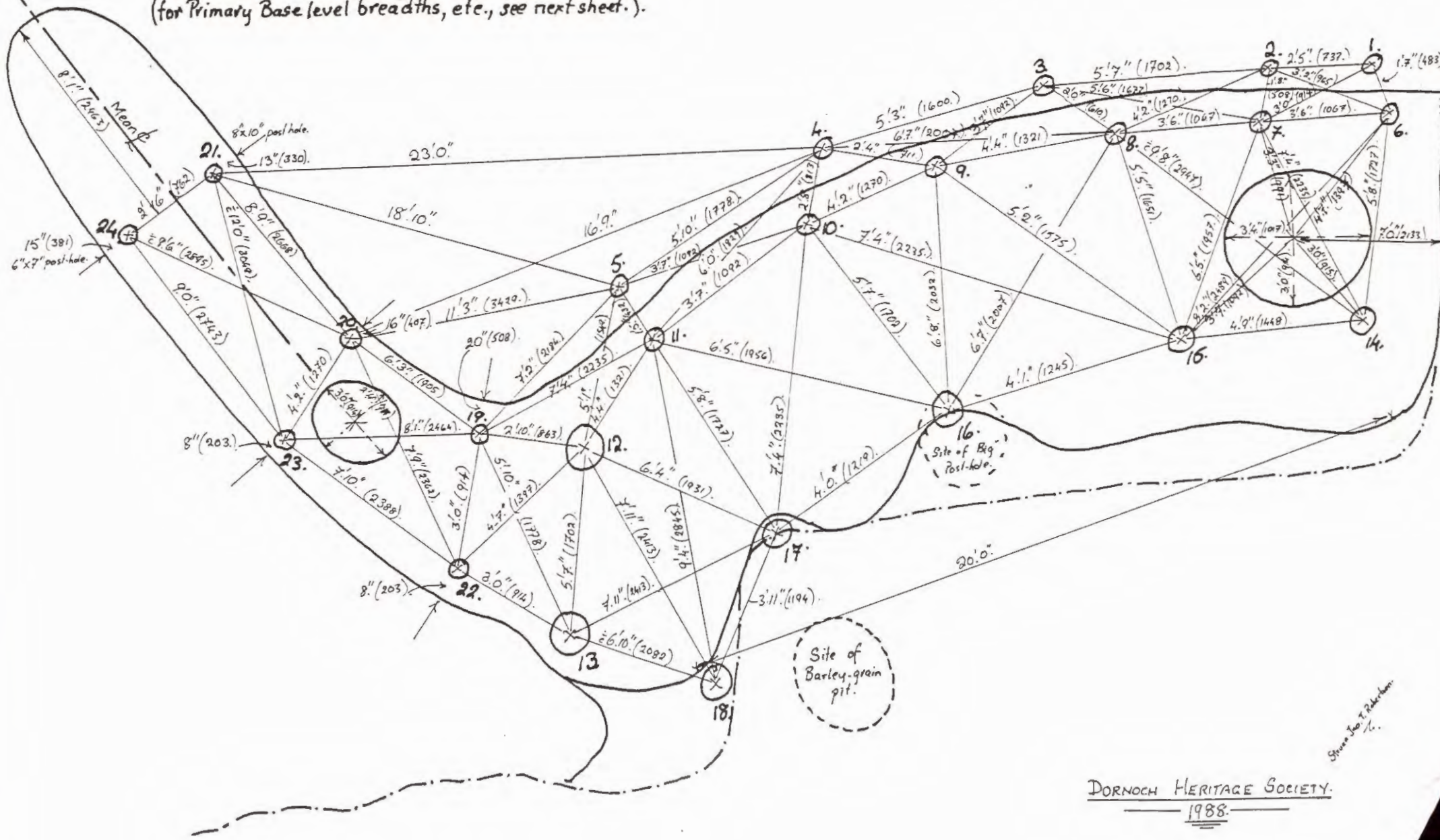
The two base levels, with their separate outer rings of post-holes, are compatible with at least two superimposed round-houses constructed upon the same site, following destruction by fire. Measurements are to within two or three inches, as the skewers inserted in the post-holes for measurement, because of the extremely stony ground, were never truly vertical. The sketch is not to scale.

( AREA OF MECHANICAL EXCAVATION. )

Bearing: 320°

# SYDERA FARM GRAVEL QUARRY DIG, DORNOCH.

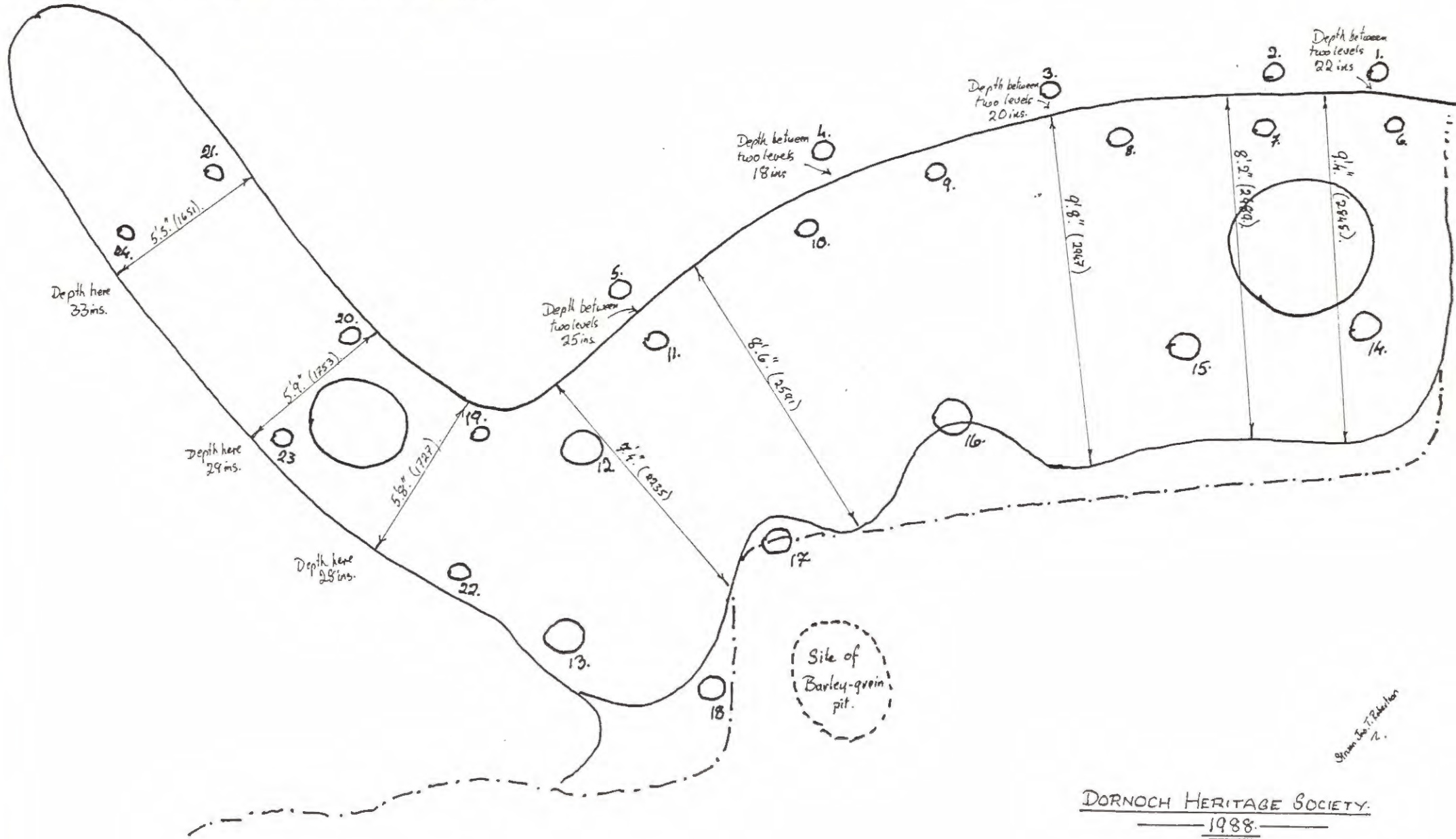
Mensuration Sketch, Diagrammatic and not to scale  
(for Primary Base level breadths, etc., see next sheet.)



Shane Joe T. Richardson  
7.

# SYDERA FARM GRAVEL QUARRY DIG, DORNOCH.

Primary Base Level breadths excavated, etc.



Simon J. Richardson  
12.