

**Report of Archaeological Excavation
April 5th – 18th 2001
Cambusmore, by Balvraid, Highland
NH 7730 / 9519**

**By
Stuart Farrell
B.A A.I.F.A F.S.A.Scot.
June 2001**

Introduction

This report is for an excavation conducted on behalf of Granit Union by the author for a quarry development at Cambusmore, by Balvraid.

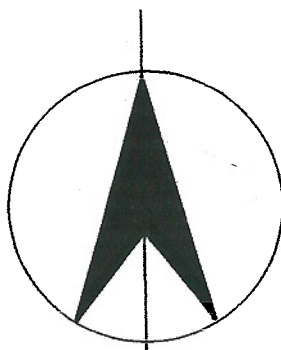
Acknowledgements

I would like to thank the following for their help during the work :

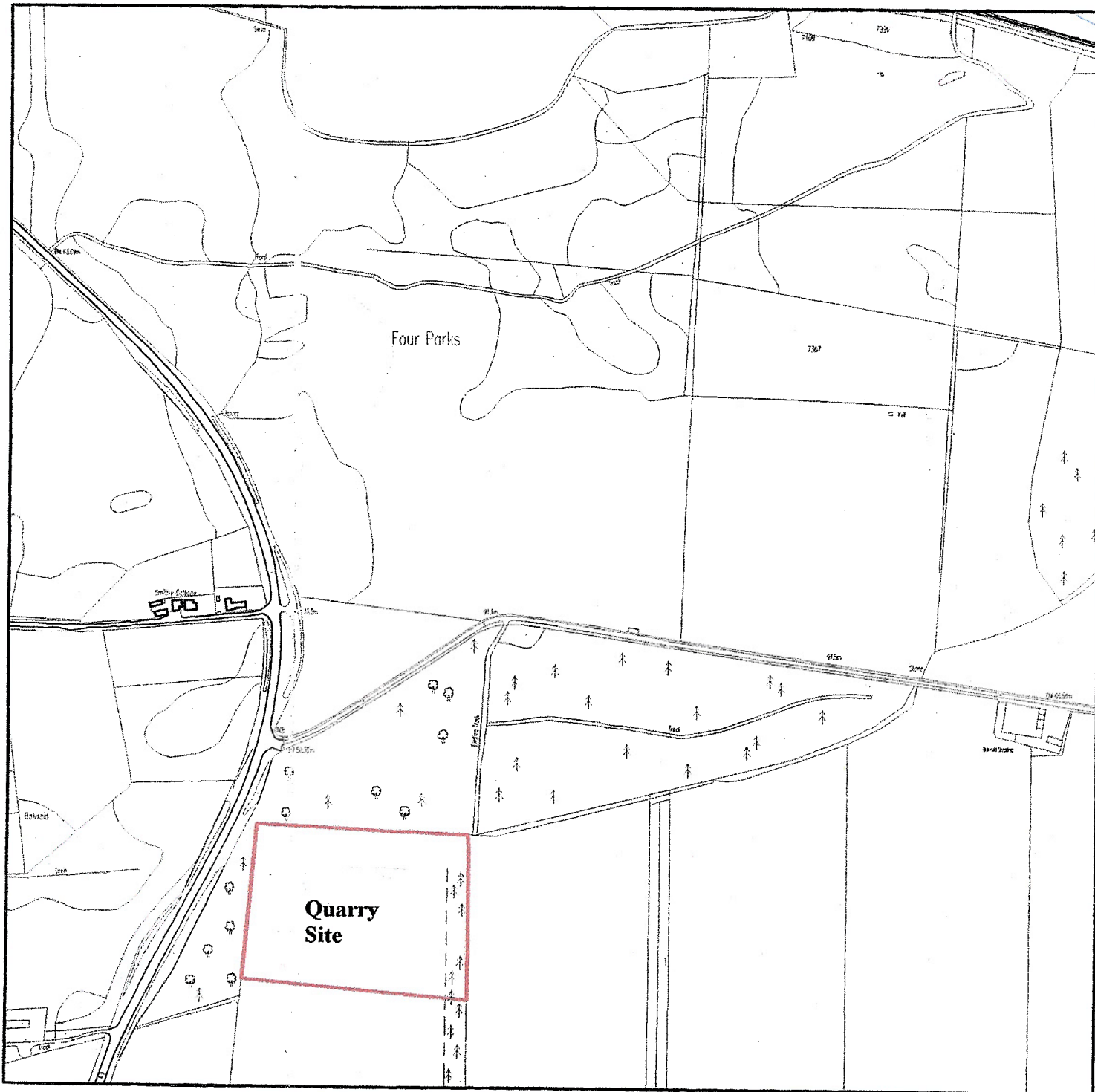
- Mr. P Gurr of Lorne Geoservices for Granit Union;
- Mr. M MacBeth of Granit Union;
- Mr. E Rutter, Mr. K Cooper & Mr. D Gordon for help with onsite work;
- Mrs S Stevenson, for illustrations;
- Miss M Hastie of Headland Archaeology Ltd, for samples analysis;
- Staff of D Rutherford Contractors for help with onsite work;
- Staff of Highland Council Archaeology Unit.

Site Location

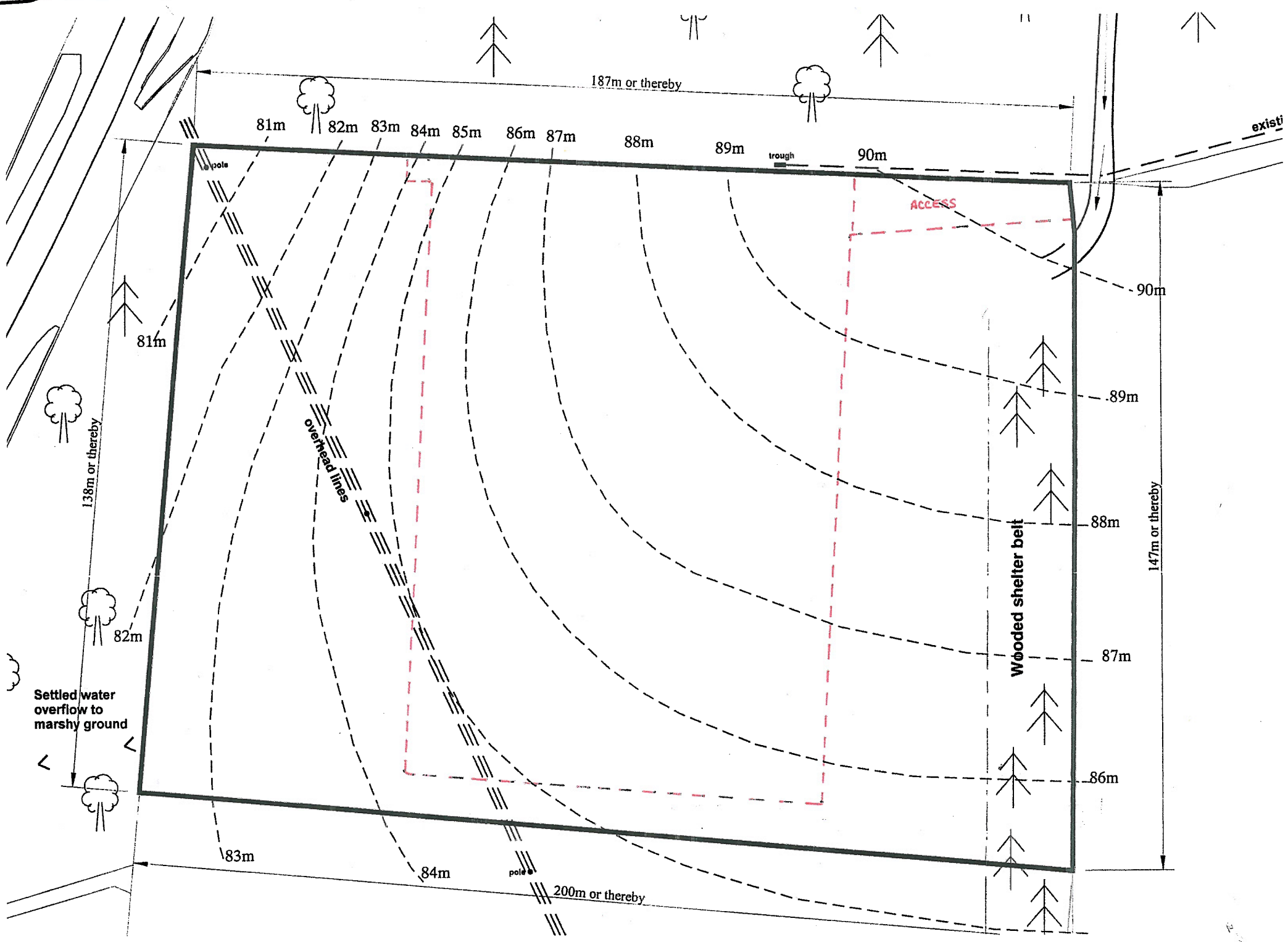


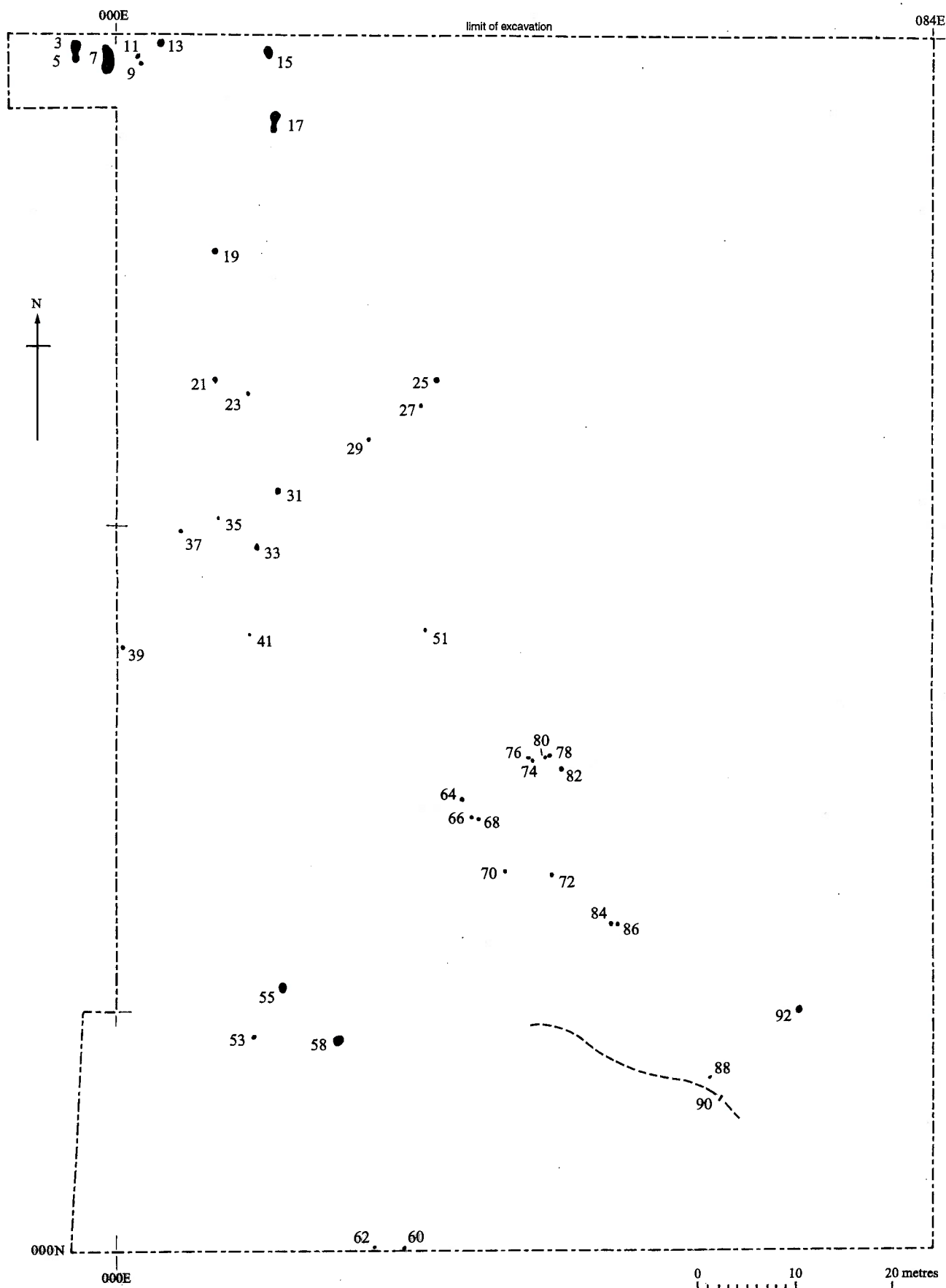


NORTH



Location Plan 1:5000





Historical Background

The area of the development lies adjacent to a recorded cropmark site.

The site is recorded in the Highland Sites and Monuments Record as - NH 79 NE 0045 (NMRS – NH79NE041) – cropmark at NH 7727 / 9511. No information is available about the site in the Highland Sites and Monuments Record or the National Monuments Record of Scotland CANMORE database, with the exception of a colour aerial photograph taken in 1972 (See over).

There is nothing indicated on the 1st edition of the Ordnance Survey map of 1879, sheet 110 (not enclosed). There is no record's of the site in Highland Council Archives or in the National Archives of Scotland.

It is recorded by the current Estate Manager (pers comm Mr. C Taylor) that this area was 'agriculturally improved' in the 1840's.

Objectives

To conduct an excavation on the area of development and to record those features revealed, this work was further to a program of trial trenching carried out by the author in March 2001 (Farrell, 2001). A copy of the project design prepared for the excavation is enclosed.

As part of the original specification provided by Highland Council Archaeology Unit, a computer digitisation was made of the aerial photograph of the cropmark in relation to the proposed development. This revealed that the cropmark site lies to the south and is unaffected by the current development.

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ENCLOSURE

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Excavation Results

Methodology

The excavation was carried out in accordance with accepted professional archaeological standards as published by the Institute of Field Archaeologists (IFA 1999). Over the period of the work a suitably qualified archaeologist was on site to carry out direction of the excavation works.

The site was topsoil stripped, with a watching brief being carried out to identify those features for excavation. Topsoil stripping was monitored to the area of the development and the access road.

Site Conditions

The area under investigation was formerly an area of field under arable cultivation. Weather on the days of work (April 5th – 18th 2001) were varied but mostly overcast with sunny periods.

Results

Underlying the turf and topsoil of an average depth of 25cm was a natural of pink sandstone and yellowish brown marl. A total area of c.12000m² was excavated using a back-acting machine with a straight edged bucket. Underlying bedrock lay very close to the surface to the area of the north-east area of the excavation, and hence no features were located in this area.

The results of these excavations were 4 areas of grouped features

Area 1 – Area of access road turning point to north edge of field [contexts 2-19] comprising of shallow scoops of possible small pits and possible hearths.

Area 2 – Area to west edge of site [contexts 20-51] comprising of postholes and occasional possible small pits. Probably of fence-lines relating to pre-agricultural improvements.

Area 3 – Area to centre of site [contexts 63-82] comprising of a mixture of features of postholes and small pits.

Area 4 – Area to south edge of site [contexts 83-92] comprising of a mixture of features including postholes, a small hearth and a corn-drying kiln.

Area 1

This area is on a gentle slope with almost all of the features predominantly shallow scoops. None of the cuts of the features in this area looked totally manmade (see photograph 1). No finds were made to any of the features excavated.

Of the possible hearths [especially contexts 3-7, 15 & 17] none had any high concentrations of charcoal or that the stones in these features were highly fire-cracked. Although hazelnut shells were recovered from some contexts [4, 12, 16 & 18] their provenience is partially dubious as to be either food or firewood.

It is highly likely that the majority of these features are possibly the result of clearance of light woodland as part of agricultural improvements.

One find was made in this area of a worked quartz flake [context 18] from a posthole [context 19] which again may be part of a fence line.

Area 2

Area to west edge of site [contexts 20-51] comprising of postholes and occasional possible small pit or large posthole [context 31]. The majority of postholes were in rough alignment's (see over) and is probably of fence-lines relating to pre-agricultural improvements or later subdivision of fields.

No finds for dating were made in this area, the only find being a small piece of worked quartz found during environmental analysis from a posthole [context 36].

Area 3

Area to centre of site [contexts 63-82] comprising of a mixture of features of postholes and possible small pits.

Here again a possible alignment of postholes were evident (see over) [contexts 64-74 & 84-86] with two groups of double postholes [66,68 & 84,86 (see photograph 3)] possibly signifying a field entranceway. The small group of features to the north of this possible entrance way was inconclusive as to their origin, many being interpreted as natural depressions in the bedrock with infilled material. The majority of the fills of these features being peat like and likely to be natural in origin

Area 4

Area to south edge of site [contexts 83-92] comprising of a mixture of features including postholes, a possible pit, a small hearth and a corn-drying kiln. (See over)

The predominant features in this area were a large field drain [context 90] that utilised the run of the natural bedrock and is likely to be mid 19th century in date, a small possible hearth [context 92], and a corn-drying kiln [context 55].

The hearth [context 92] (see photograph 4) produced a find of a worked stone object, but unfortunately the charcoal was very limited to this feature and could not be dated by C14. The stones in this feature were not highly fired and no

internal setting of stones was visible, it is likely to be a small fire set in a natural depression only.

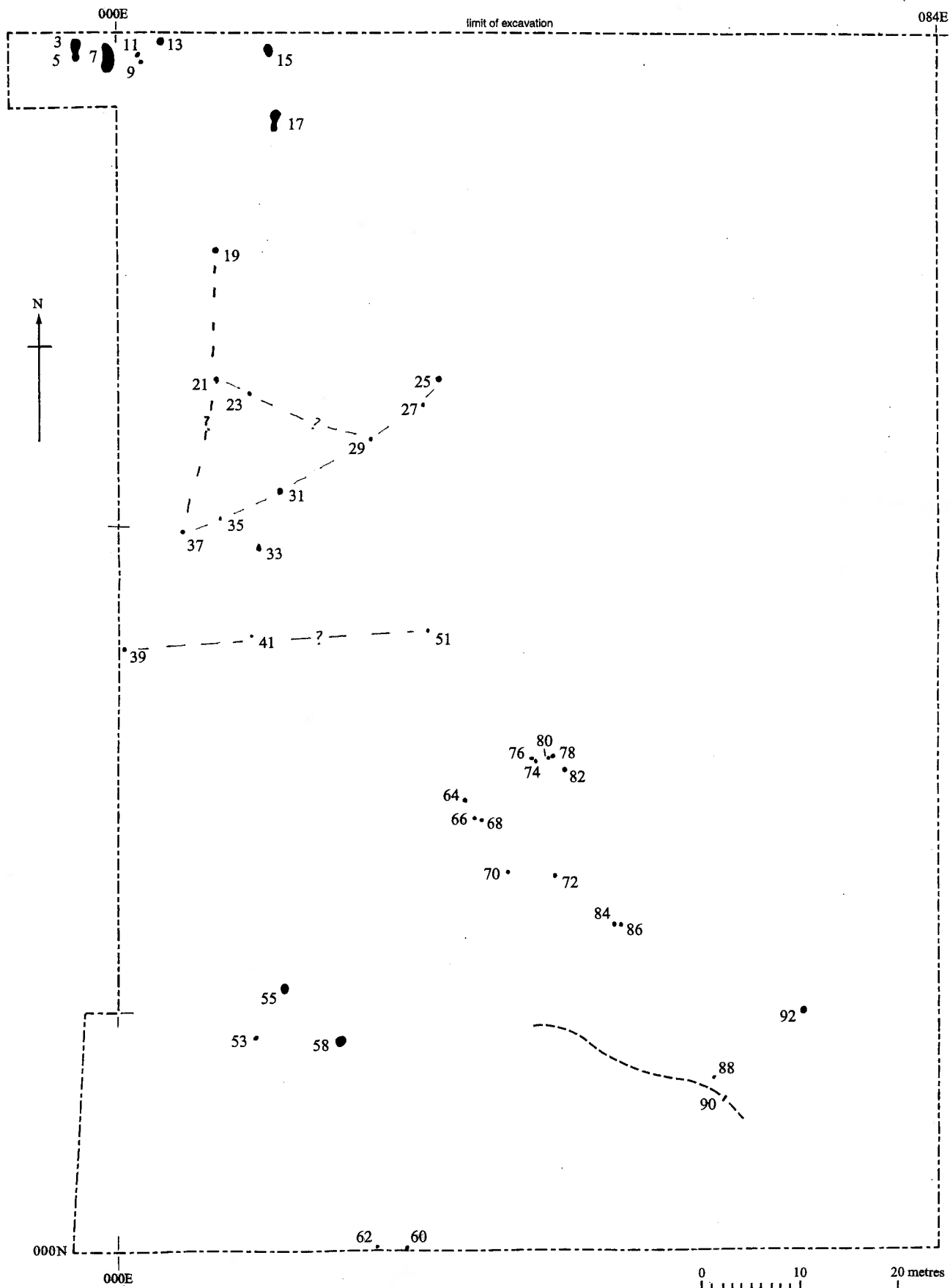
A possible pit [context 58] (see photograph 2) whilst upon ½ section looked like a large pit, upon complete excavation revealed to be a stone or tree hole.

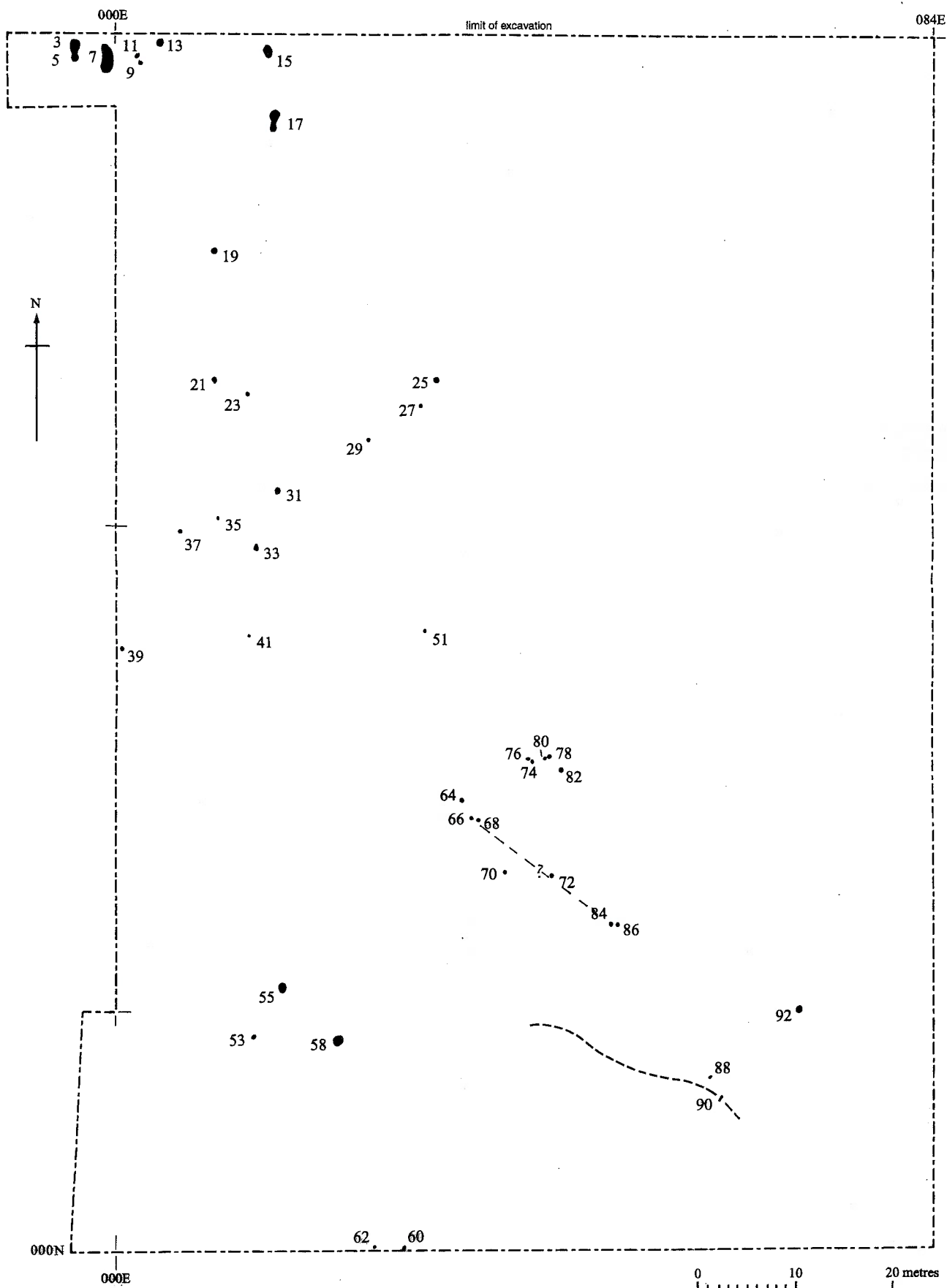
The most prominent feature of this area was the corn-drying kiln [context 55] (see photographs 5-8 and drawings). The kiln is of unknown date though likely to be pre-19th century in date. Unfortunately charcoal was very limited to the deposits within and below the kiln as to be non-existent and therefore could not be dated by C14.

The other features in this area [contexts 53, 60, 62 & 88] were possible postholes, with contexts 53 & 88 being probably 19th century in date, whilst 60 & 62 are of unknown function and date. Again fills from these deposits were inconclusive and may be partially natural formed.

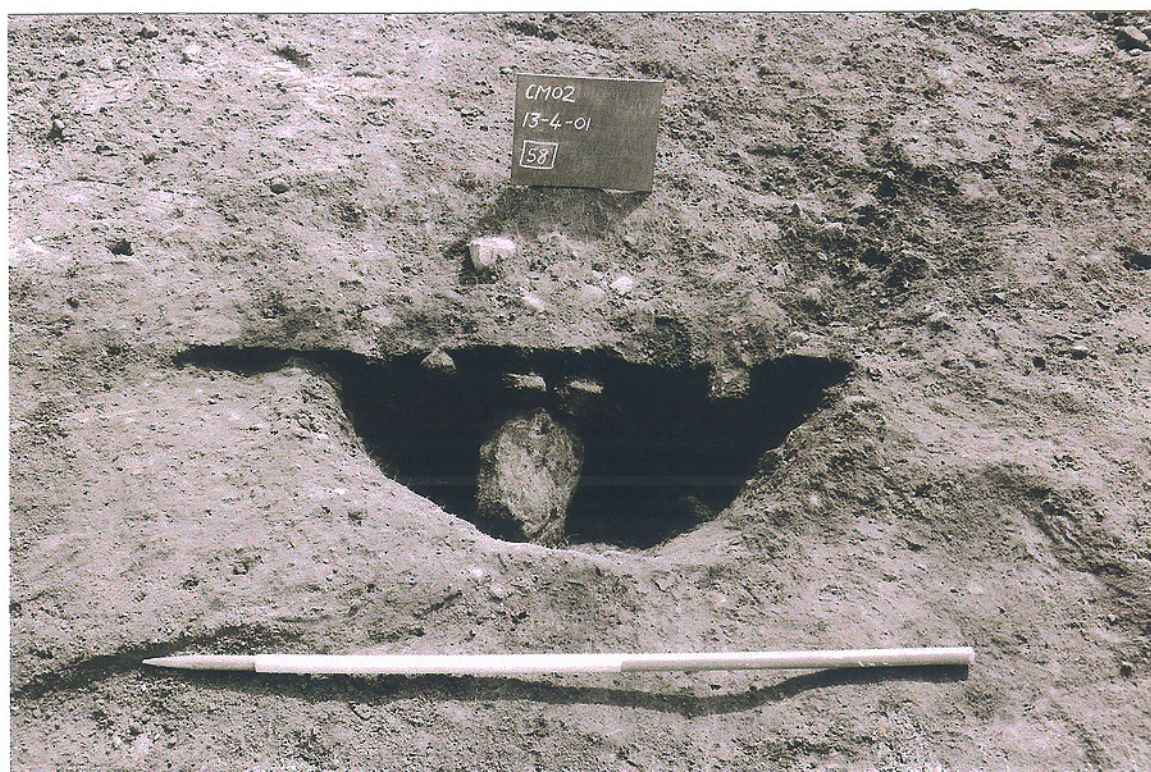
Environmental Analysis

Overall a total of 30 environmental samples were taken with the results being very poor (see full report, copy enclosed). The majority of samples contained modern weeds and roots. Samples taken for C14 dates proved also to be very poor being in the form of softwood or peat. Overall the site was very poor in environmental information to be gained.





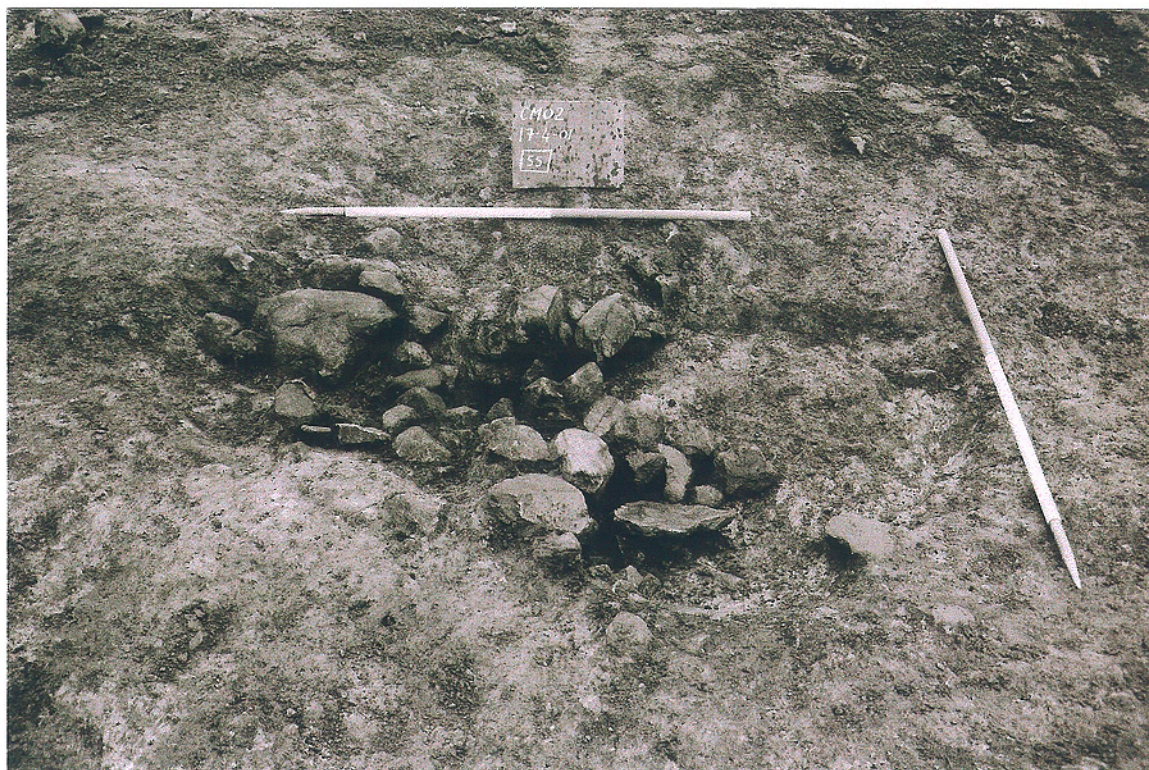
Top : Photo 1 – View of Possible Hearth [context 5 & 3] area 1 – scale 1m
Bottom : Photo 2 – View of pit [context 58] area 4 – scale 1m



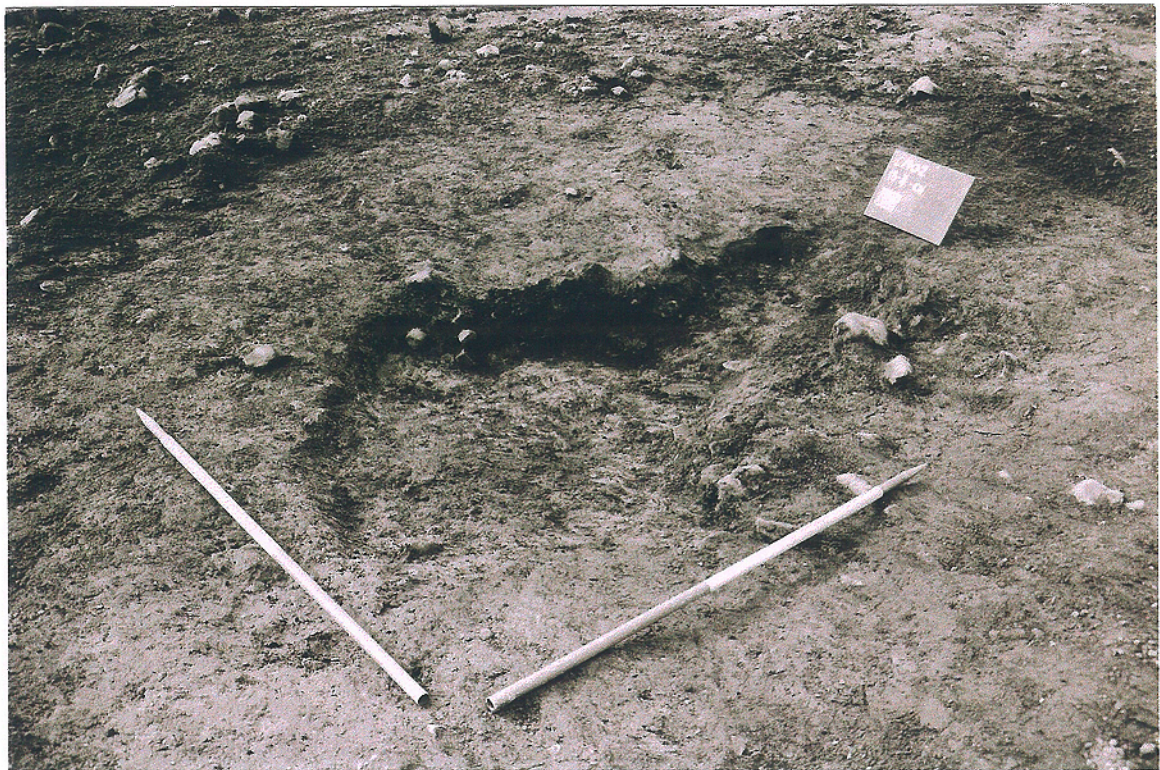
Top : Photo 3 – View of double postholes [context 86 & 84] area 4 – scale 1m
Bottom : Photo 4 – View of hearth [context 92] area 4 – scale 1m



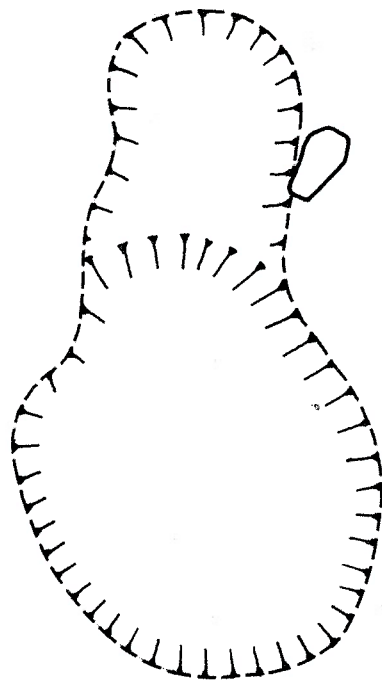
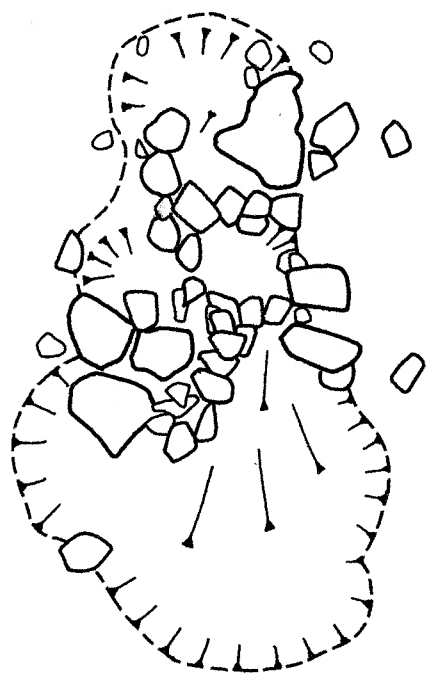
Top : Photo 5 – View of kiln facing east [context 55] – scale 1mx1m
Bottom : Photo 6 – View of kiln facing north [context 55] – scale 1mx1m



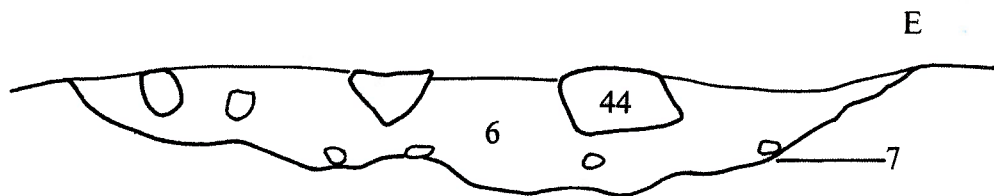
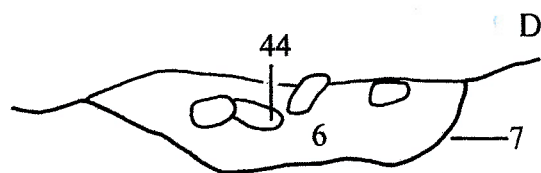
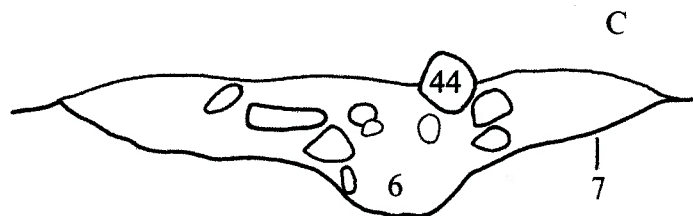
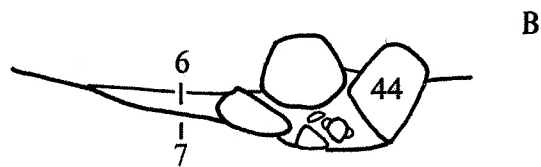
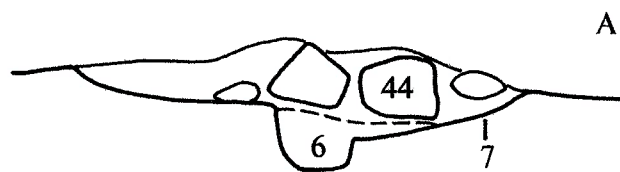
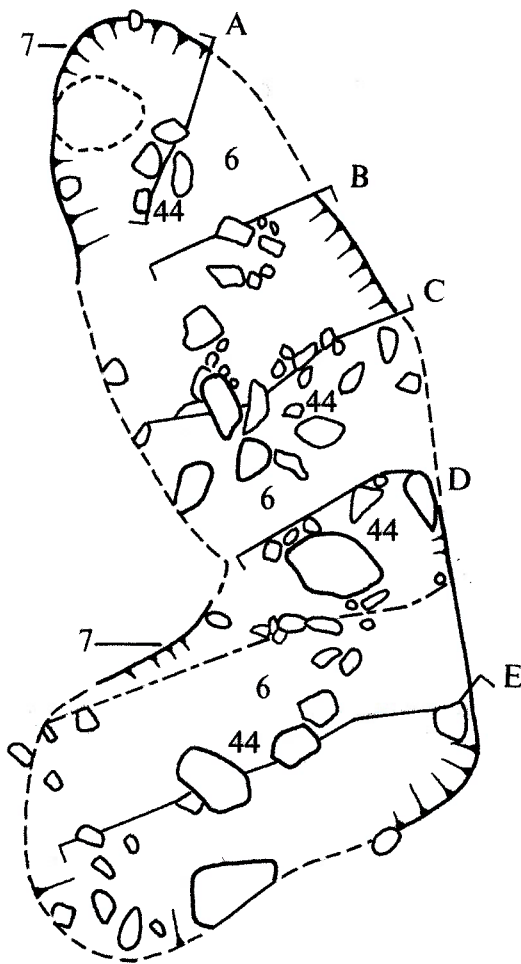
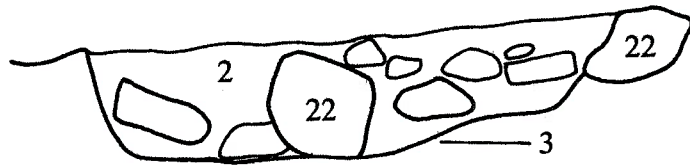
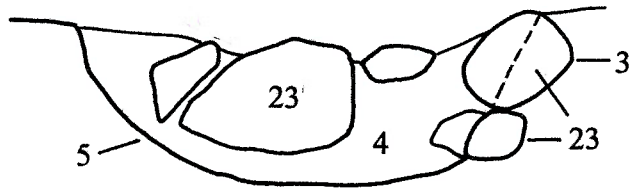
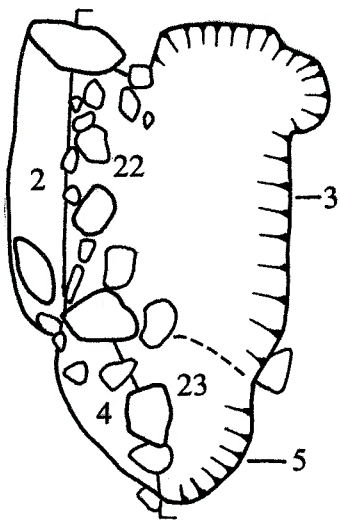
Top : Photo 7 - View of kiln upon ex facing northwest [context 55] – scale 1mx1m
Bottom : Photo 8 – View of kiln upon ex facing north [context 55] – scale 1mx1m



Kiln

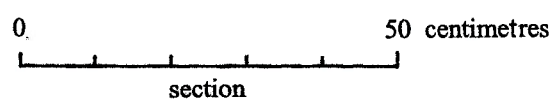
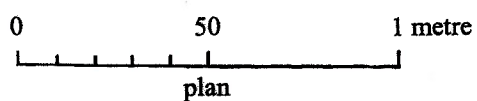
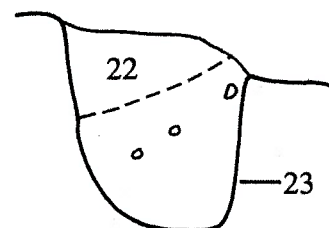
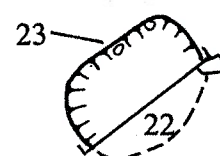
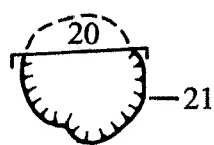
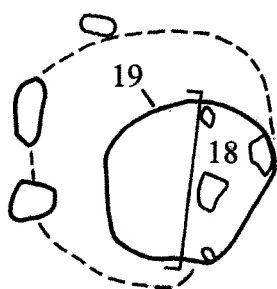
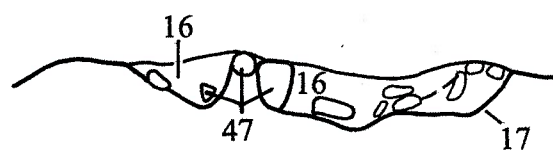
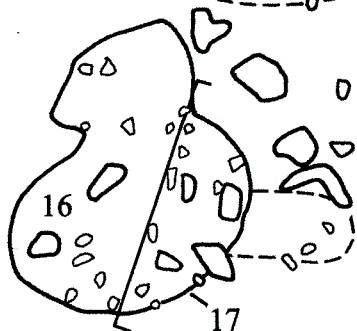
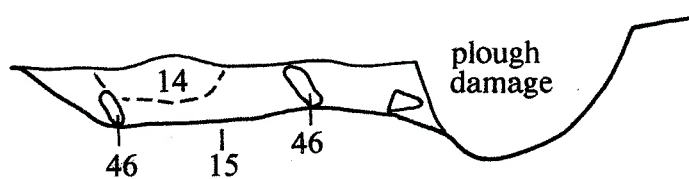
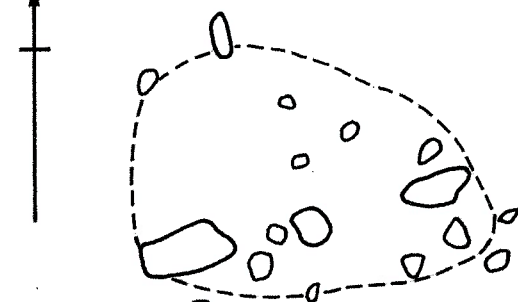
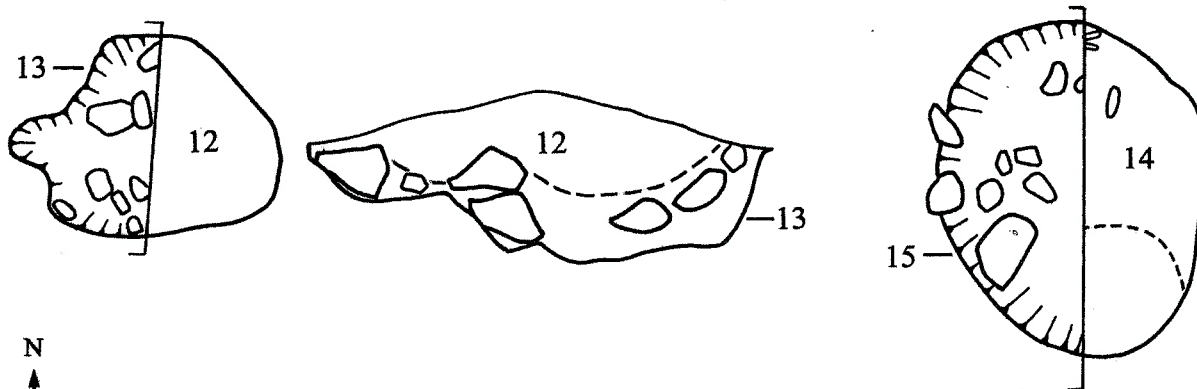
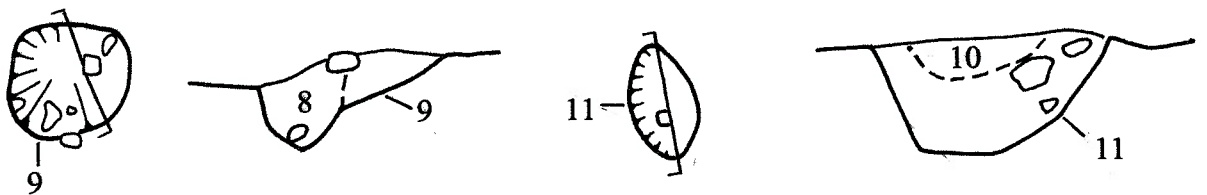


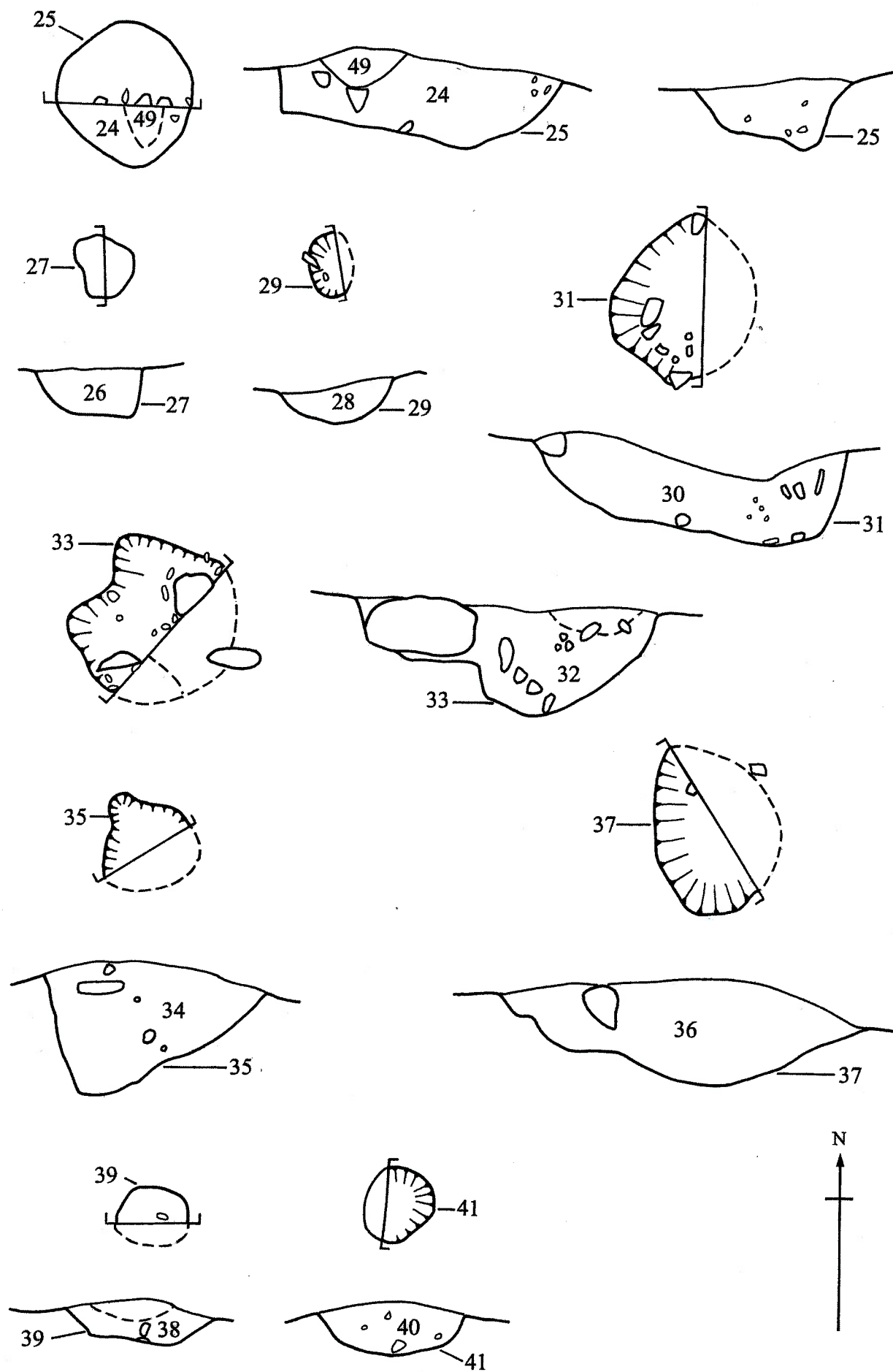
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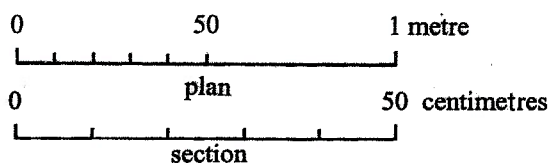
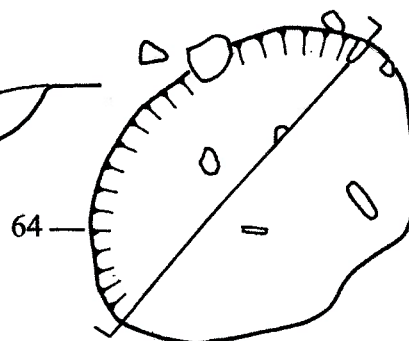
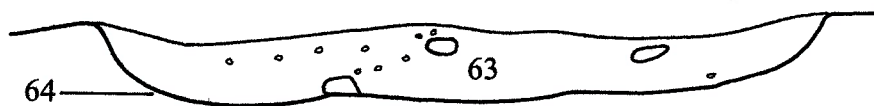
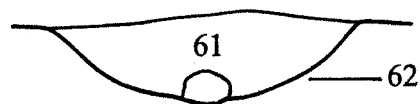
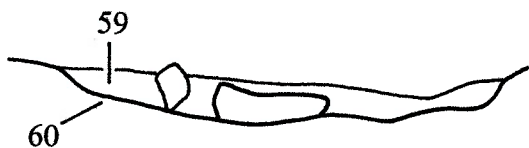
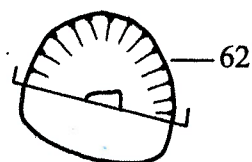
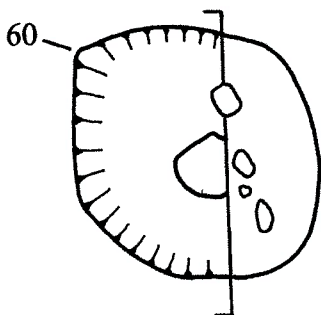
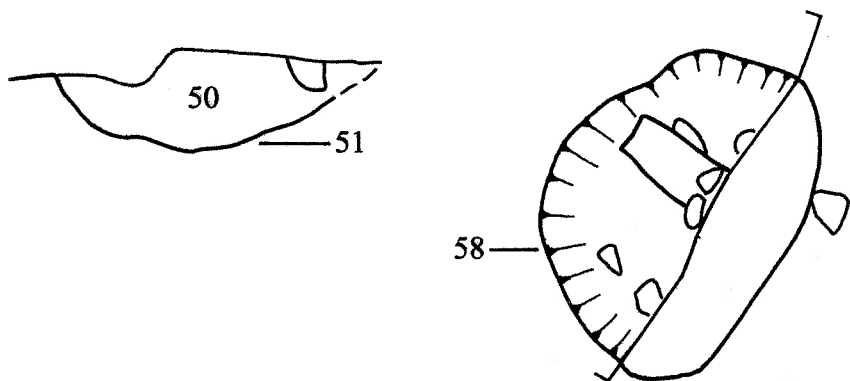
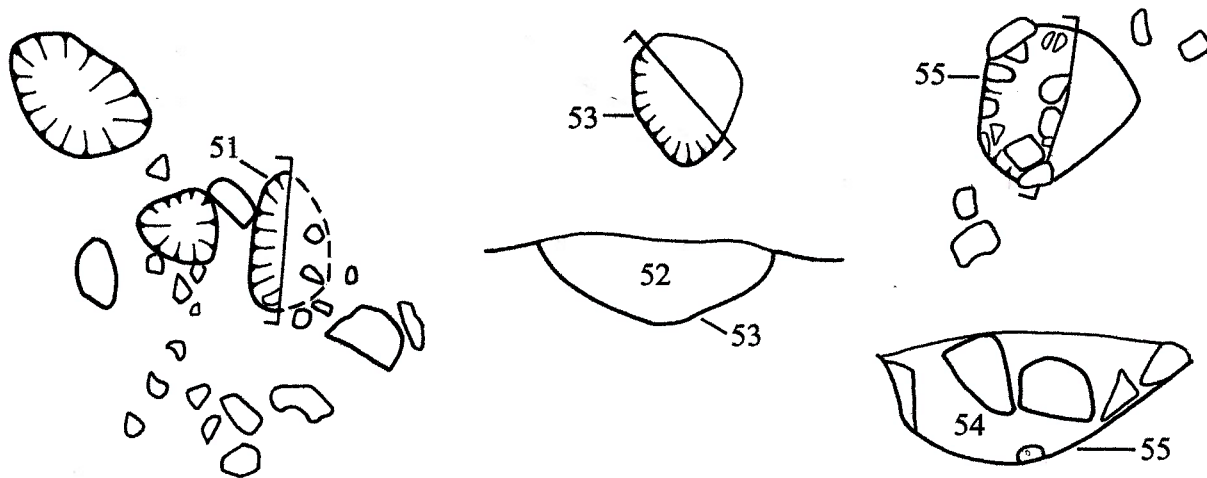


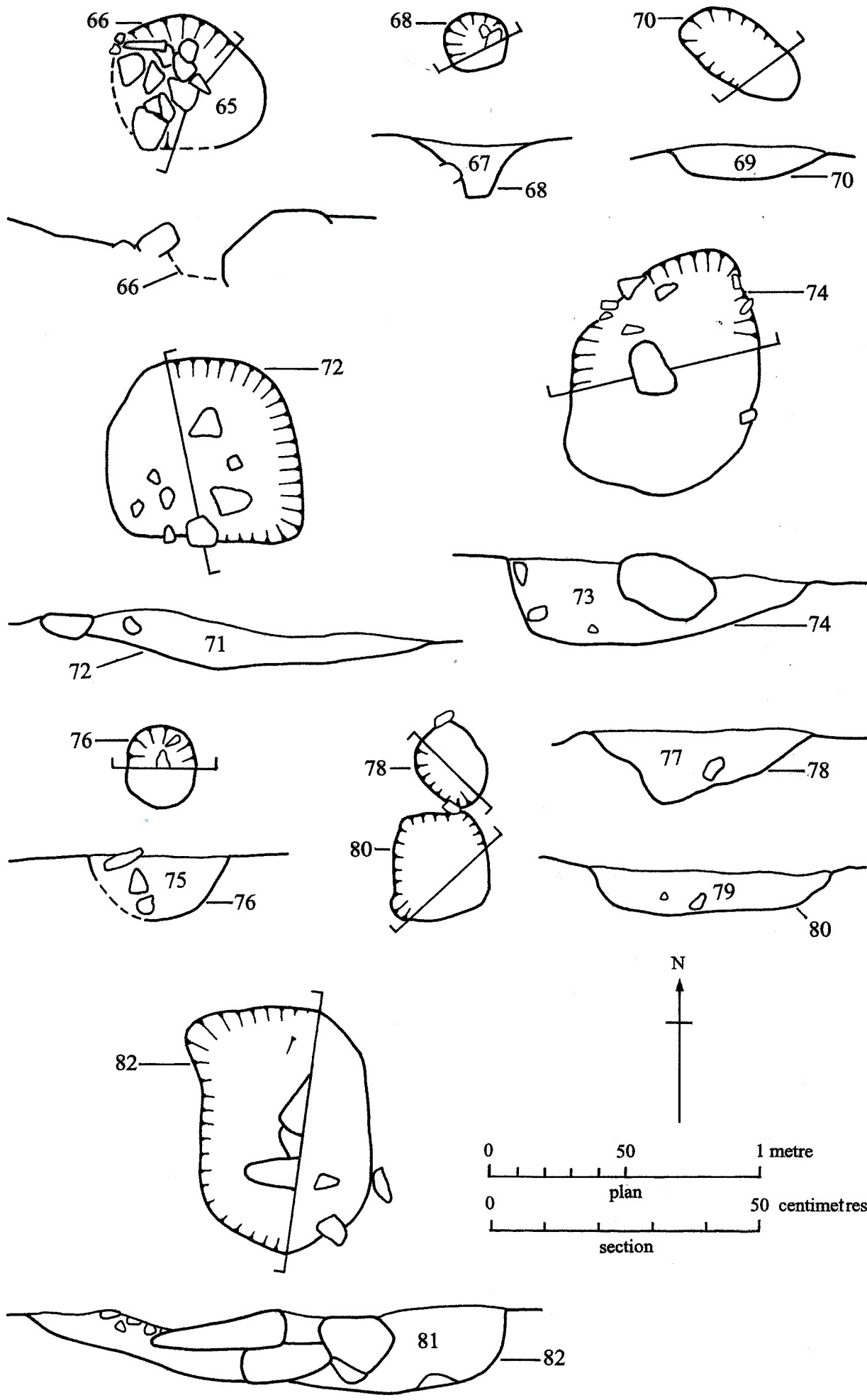
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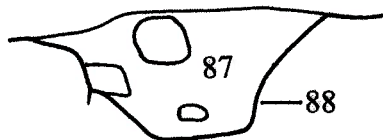
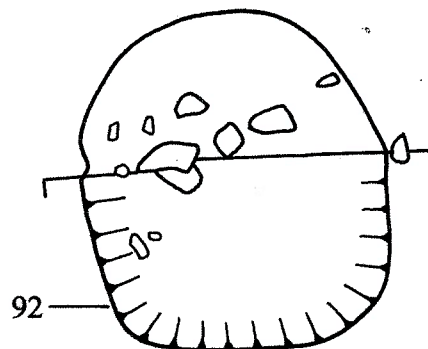
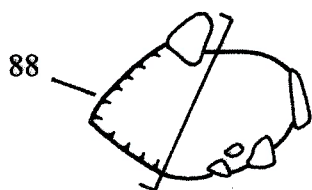
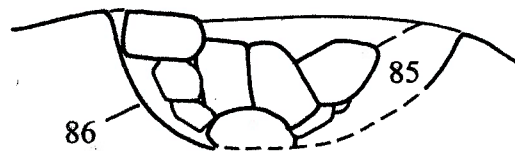
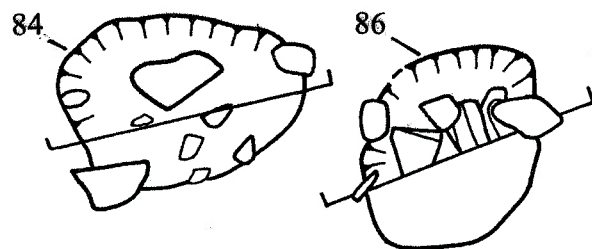
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Finds

The site was almost sterile in finds. Only 2 objects were recovered insitu, whilst 2 others were recovered during post-excavation analysis :

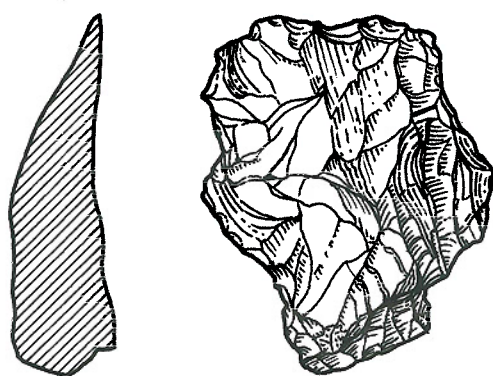
1 - A worked quartz flake (see illustration) – from context 18 – small worked scrapper, by hammer technique, with retouch.

Worked quartz is not uncommon in this area as it occurs naturally and that there is a lack of natural flint. Worked quartz has been found locally at Dunrobin by Golspie, Culhill by Dornoch, Littleferry Links and near Tain. To date the only comparison of worked quartz material found locally that is published is from the excavations at Lairg (McCulloch & Tipping, 1998) though this is limited as quartz is given “little consideration” (ibid, 137) by archaeologists and the problems of analysis of worked quartz. (See discussion in McCulloch & Tipping)

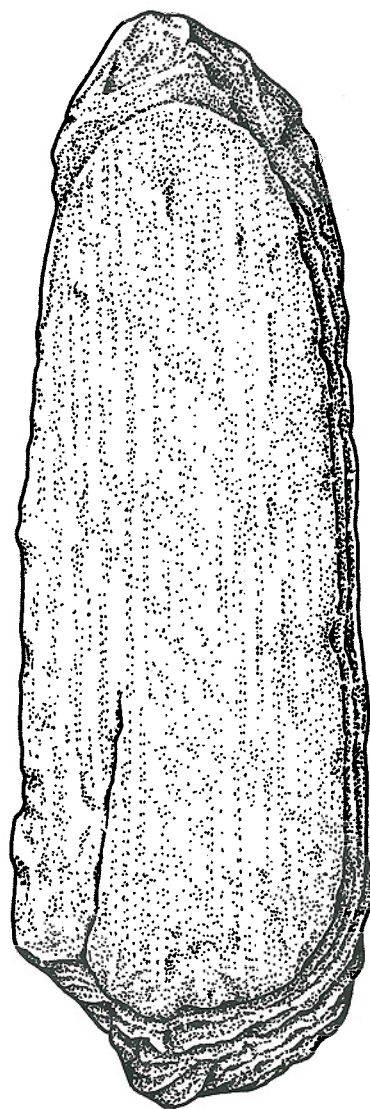
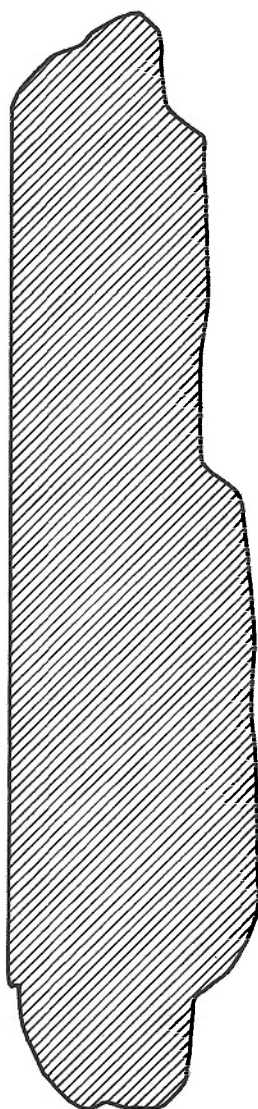
2 - A worked stone object (see illustration) – from context 91 - Possible rubbing stone of local granite. Of unknown date, but likely to be prehistoric.

3 – Fragment of copper coin – from context 81 – of unknown date.

4 – Small quartz flake – from context 36.



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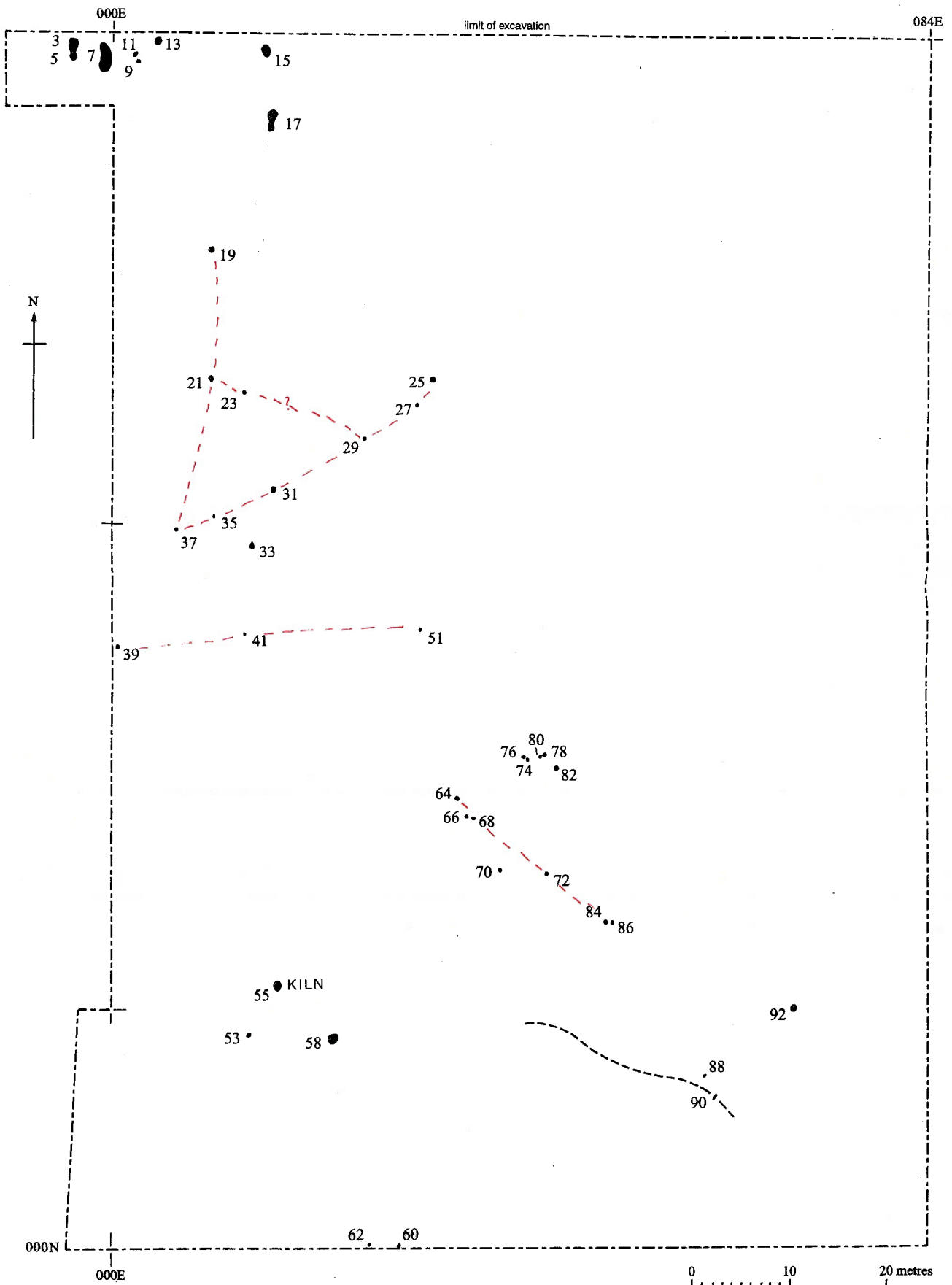


0 1 2 3 4 5 centimetres

Summary of results

It is probable that the majority of features revealed in the excavation are related to pre and post-agricultural improvement, (see over) especially in those areas of excavation where postholes relating to fence-lines were revealed. Also in the find of a corn-drying kiln and drainage.

It is probable that one or two of the features close to the south edge of the excavation are likely to be prehistoric in date (especially context 91), due to them being close to the cropmark. A survey of the wider area around the development area shows a number of prehistoric sites including cairns and a broch. Further work will be required if the quarry is extended, especially to the area closest to the site of the cropmark.



Archive

The following items are to be deposited in the National Monuments Record in Edinburgh:

- Context sheets for trial trenching & excavation
- Photographic sheets for trial trenching & excavation
- Site notebook
- Colour slides of excavation
- Black & white photographs & negatives of excavation
- Soil chart
- Soil Samples Report by Headland Archaeology Ltd. June 2001
- Site Plans and section drawings (original and illustrators)

References

IFA (1999) By-laws, Standards and Policy Statements of the Institute of Field Archaeologists. Reading.

Highland Council Sites & Monuments Record entry NH79NE 045.

McCulloch, R P J & Tipping, R (1998) The Lairg project 1988-1996 – The Evolution of an Archaeological Landscape in Northern Scotland. STAR monograph 3. Edinburgh.

National Monuments Record CANMORE database entry NH79NE 041.

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Assessment of Soil Samples from Cambusmore, Dornoch.

Mhairi Hastie
June 2001

Client: Stuart Farrell

Assessment of Soil Samples from Cambusmore, Dornoch.

Mhairi Hastie

BACKGROUND

Excavations of a possible Iron Age settlement site at Cambusmore, Dornoch in advance of quarry extensions was undertaken by Stuart Farrell. A number of features were uncovered including a series of postholes/pits and small hearths, and the remains of a fence line and ditch relating to agricultural improvements of the early 19th century. Bulk samples were taken from twenty-nine contexts for palaeoenvironmental assessment.

METHOD

The samples were subjected to a system of flotation in a Siraf style flotation tank. The floating debris (flot) was collected in a 250 μ m sieve and, once dry scanned using a binocular microscope. Any material remaining in the flotation tank (retent) was wet-sieved through a 1mm mesh and air-dried. This was then sorted by eye and material of archaeological significance removed.

Results are presented in Tables 1 and 2.

RESULTS

The concentration of archaeological finds recovered from these samples was extremely low. The samples consisted mainly of modern root/weed seeds and insect debris.

Small Finds - A small number of finds were recovered from two samples - one badly corroded copper coin and a possible quartz scraper were recovered from Context 81 (Sample 24) and small quantity of quartz flakes were recovered from Context 36 (Sample 14).

Bone - One very small fragment of bone was recovered from Context 50 (Sample 15).

Wood Charcoal - Wood charcoal was recovered from a number of samples, however, this was present only in very small quantities. The primary value of the charcoal will be as a source of dating evidence. Those identified with an asterisk in Table 1 and 2 probably contain sufficient material for an AMS date. Identification of species of wood represented would need to be undertaken prior to dating.

Plant Remains - Occasional fragments of hazelnut shell was recovered from five samples (Contexts 4, 12, 16, 18 and 30). They are, however, of little significance and could equally represent the remains of food or have been burnt along with hazel twigs used for fuel.

Three carbonised weed seeds were also recovered from Context 18 (Sample 1). Preservation was poor and only tentative identifications could be gained. One *Chenopodiaceae* indet. (fat hen family) and two *Galium aprine* (goosegrass/cleavers) were present. The origin of the low concentration of carbonised weed seeds is uncertain and do not warrant further study.

Other Carbonised Material - Numerous carbonised, well-humified, peat fragments and heather charcoal were recovered from a large number of the samples. The presence of peat and heather within the majority of samples probably indicates the collection and utilisation of peat turfs as a main source of fuel.

RECOMMENDATIONS

Apart from the incorporation of small finds into analysis of material collected by hand, further analysis of the environmental remains recovered from the samples would be of very little interpretative value. However a summary of methodology and results from this assessment should be added to any final report.

TABLE 1: COMPOSITION OF FLOTS

Sample Number	Context Number	Context Description	Total Flot	Weed seeds	Charcoal		Comments
			Vol (ml)		Qty	AMS	
1	18	Fill of hearth	20		+		
2	16	Fill of possible hearth	50		+	*	
3	14	Fill of hearth	10		+		
4	12	Fill of possible hearth	100		++	*	Softwood
5	2	Fill of hearth	100		+		
6	4	Fill of posthole	50		++	*	Softwood
7	8	Fill of posthole	20				No finds
8	6	Fill of posthole	10		+		
9	49	Fill of posthole	10		++	*	Softwood
10	24	Fill of posthole	20		+	*	Softwood
11	30	Fill of posthole	50	+	++	*	Chenopodiaceae indet. x 1 cf. Galium sp. x 2 Softwood
12	32	Fill of posthole	50		+++	*	Softwood
13	34	Fill of posthole	50				No finds
14	36	Fill of posthole	20		+		
15	50	Fill of posthole	10				No finds
16	52	Fill of posthole	10		+		
17	54	Fill of hearth	20		+		
18	58	Fill of shallow pit	50		+		
19	57	Fill of shallow pit	50		+		
20	61	Fill of posthole	20				No finds
21	59	Fill of posthole	10				No finds
22	63	Fill of shallow pit	50		+++	*	
23	73	Fill of posthole	50		+	*	Softwood
24	81	Fill of shallow pit	50		+		
25	71	Fill of hearth	20		+		
26	83	Fill of posthole/pit	<10				Peat fragments +++++
27	85	Fill of posthole	20		+		
28	87	Fill of posthole	<10				No finds
29	91	Fill of hearth	50		+		

Key: + = rare, ++ = occasional, +++ = common and +++++ = abundant
 * = sufficient quantity of charcoal for AMS date

TABLE 2: COMPOSITION OF RETENTS

Sample Number	Context Number	Context Description	Coin	Quartz Tool	Quartz Fragments	Bone Fragments	Hazelnut Shell	Charcoal		Comments
								Qty	AMS	
1	18	Fill of hearth					+	+		
2	16	Fill of possible hearth					+	+	*	
3	14	Fill of hearth						+		
4	12	Fill of possible hearth						+	*	Soft Wood
5	2	Fill of hearth						+	*	Soft Wood
6	4	Fill of posthole					+	+	*	Soft Wood
7	8	Fill of posthole						+		
8	6	Fill of posthole						+		
9	49	Fill of posthole								No finds
10	24	Fill of posthole						+		
11	30	Fill of posthole						+		
12	32	Fill of posthole						+	*	Soft Wood
13	34	Fill of posthole								No finds
14	36	Fill of posthole			+					
15	50	Fill of posthole				+		+		
16	52	Fill of posthole								No finds
17	54	Fill of hearth						+		
18	58	Fill of shallow pit						++	*	Soft Wood
19	57	Fill of shallow pit						+		
20	61	Fill of posthole								No finds
21	59	Fill of posthole								No finds
22	63	Fill of shallow pit						+	*	
23	73	Fill of posthole						+	*	Soft Wood
24	81	Fill of shallow pit	+	+					*	Soft Wood
25	71	Fill of hearth						+	*	Soft Wood
26	83	Fill of posthole/pit						+		
27	85	Fill of posthole						+	*	Soft Wood
28	87	Fill of posthole								No finds
29	91	Fill of hearth						+		

Key: + = rare, ++ = occasional, +++ = common and ++++ = abundant
 * = sufficient quantity of charcoal for AMS date

Cambusmore CM02 – Context Register

- 1 – topsoil
- 2 – fill of hearth
- 3 – cut of 2
- 4 – fill of posthole
- 5 – cut of 4
- 6 – fill of possible linear feature
- 7 – cut of 6
- 8 – fill of posthole
- 9 – cut of 8
- 10 – fill of posthole
- 11 – cut of 10
- 12 – fill of possible hearth
- 13 – cut of 12
- 14 – fill of hearth
- 15 – cut of 14
- 16 – fill of possible hearth and spread deposit
- 17 – cut of 16
- 18 – fill of hearth
- 19 – cut of 18
- 20 – fill of posthole
- 21 – cut of 20
- 22 – fill of posthole
- 23 – cut of 22
- 24 – fill of posthole
- 25 – cut of 24
- 26 – fill of posthole
- 27 – cut of 26
- 28 – fill of posthole
- 29 – cut of 28
- 30 – fill of posthole
- 31 – cut of 30
- 32 – fill of posthole
- 33 – cut of 32
- 34 – fill of posthole
- 35 – cut of 34
- 36 – fill of posthole
- 37 – cut of 36
- 38 – fill of posthole
- 39 – cut of 38
- 40 – fill of posthole
- 41 – cut of 40
- 42 – stone fill of context 3
- 43 – stone fill of context 5
- 44 – stone fill of context 7
- 45 – stone fill of context 13
- 46 – fill of context 15
- 47 – fill of context 17
- 48 – fill of context 19
- 49 – fill of context 25
- 50 – fill of posthole
- 51 – cut of 50
- 52 – fill of posthole
- 53 – cut of 52

54 – fill of hearth
55 – cut of 54
56 – fill of shallow pit
57 – fill of shallow pit
58 – cut of pit [56 & 57]
59 – fill of possible posthole
60 – cut of 59
61 – fill of posthole
62 – cut of 61
63 – fill of pit
64 – cut of 63
65 – fill of posthole
66 – cut of 65
67 – fill of posthole
68 – cut of 67
69 – fill of posthole
70 – cut of 69
71 – fill of hearth
72 – cut of 71
73 – fill of posthole
74 – cut of 73
75 – fill of posthole
76 – cut of 75
77 – fill of posthole
78 – cut of 77
79 – fill of posthole
80 – cut of 79
81 – fill of shallow pit
82 – cut of 81
83 – fill of large posthole or small hearth
84 – cut of 83
85 – fill of posthole
86 – cut of 85
87 – fill of posthole
88 – cut of 87
89 – fill of field drain
90 – cut of 89
91 – fill of hearth
92 – cut of 91
93 – fill of posthole context 66
94 – fill of kiln/furnace 55

CM02 – Details of Slides & Black & White Photographs

Slides and black & white photographs have been deposited with the National Monuments Record, Edinburgh.

Film 1

1 – View of machining facing W	5-4-01
2 – cut of hearth & possible posthole [context 3 & 5] facing W	10-4-01
3 – ibid	10-4-01
4 – cut of possible linear feature context 7 facing N	10-4-01
5 – ibid but facing NE	10-4-01
6 – cut of posthole context 9 facing NE	10-4-01
7 – cut of posthole context 11 facing E	10-4-01
8 – cut of hearth context 13 facing E	10-4-01
9 – cut of hearth context 15 facing E	10-4-01
10 – cut of possible hearth context 17 facing W	10-4-01
11 – ibid	10-4-01
12 – cut of hearth context 19 facing W	10-4-01
13 – cut of posthole context 21 facing N	10-4-01
14 – cut of posthole context 23 facing SE	10-4-01
15 – cut of posthole context 25 facing S	10-4-01
16 – cut of posthole context 27 facing E	10-4-01
17 – cut of posthole context 29 facing E	10-4-01
18 – cut of posthole context 31 facing E	10-4-01
19 – cut of posthole context 33 facing SE	10-4-01
20 – cut of posthole context 35 facing SE	10-4-01
21 – cut of posthole context 37 facing NE	10-4-01
22 – cut of posthole context 39 facing S	10-4-01
23 – cut of posthole context 41 facing W	10-4-01
24 – view of machining facing S	11-4-01
25 – cut of large posthole or small pit context 25 facing SW	12-4-01
26 – ibid context 31 facing SE	12-4-01
27 – cut of possible hearth context 37 facing E	12-4-01
28 – cut of posthole context 51 facing E	12-4-01
29 – cut of posthole context 53 facing NE	12-4-01
30 – cut of hearth context 55 facing E (2 B & W)	12-4-01

Film 2

1 – cut of pit context 58 facing SE	13-4-01
2 – ibid	17-4-01
3 – cut of pit/treebole context 58 facing SE	17-4-01
4 – cut of possible pit context 60 facing E	17-4-01
5 – cut of posthole context 62 facing S	17-4-01
6 – cut of pit context 64 facing SE	17-4-01
7 – cut of posthole context 66 facing E	17-4-01
8 – cut of possible posthole context 68 facing SE	17-4-01
9 – cut of possible posthole context 70 facing SE	17-4-01
10 – cut of hearth context 72 facing W	17-4-01
11 – ibid	17-4-01
12 – cut of pit context 72 facing W	17-4-01
13 – cut of pit context 74 facing S	17-4-01
14 – cut of posthole context 76 facing S	17-4-01
15 – cut of posthole's 78 & 80 facing E	17-4-01
16 – cut of hearth context 82 facing E	17-4-01
17 – ibid	17-4-01
18 – cut of posthole context 84 facing S	17-4-01
19 – cut of posthole context 86 facing S	17-4-01
20 – cut of posthole's 84 & 86 facing S	17-4-01
21 – cut of posthole context 88 facing SE	17-4-01
22 – cut of hearth context 92 facing N	17-4-01

23 – ibid	17-4-01
24 – cut of hearth context 55 facing W	17-4-01
25 – cut of hearth context 55 facing N	17-4-01
26 – cut of hearth context 55 facing E	17-4-01
27 – cut of hearth context 55 facing S	17-4-01
28 – vertical shot of context 55 facing W	17-4-01
29 – ibid	17-4-01

Film 3

1 – cut of pit context 60 facing E	18-4-01
2 – cut of posthole context 62 facing S	18-4-01
3 – cut of pit context 64 facing SE	18-4-01
4 – cut of pit context 74 facing E	18-4-01
5 – cut of possible hearth [stones in situ] context 82 facing E	18-4-01
6 – cut of possible hearth [stones removed] context 82 facing E	18-4-01
7 – cut of hearth context 72 facing E	18-4-01
8 – group shot of cuts 84 & 86 [stones in situ] facing S	18-4-01
9 – group shot of cuts 84 & 86 [stones removed] facing S	18-4-01
10 – cut of possible posthole context 88 facing SE	18-4-01
11 – cut of possible hearth context 92 facing N	18-4-01
12 – cut of hearth/kiln facing N	18-4-01
13 – ibid	18-4-01
14 – ibid	18-4-01
15 – ibid	18-4-01
16 – ibid	18-4-01
17 – ibid	18-4-01

Cambusmore CM02 – Sample Register

- 1 – Context 18 – 2 bags – fill of hearth
- 2 – Context 16 – 2 bags – fill of possible hearth
- 3 – Context 14 – 2 bags – fill of hearth
- 4 – Context 12 – 2 bags – fill of possible hearth
- 5 – Context 2 – 3 bags – fill of hearth
- 6 – Context 4 – 2 bags – fill of posthole
- 7 – Context 8 – 1 bag – fill of posthole
- 8 – Context 6 – 3 bags – fill of possible linear feature
- 9 – Context 49 – 1 bag – fill of posthole
- 10 – Context 24 – 2 bags – fill of posthole
- 11 – Context 30 – 3 bags – fill of posthole
- 12 – Context 32 – 2 bags – fill of posthole
- 13 – Context 34 – 2 bags – fill of posthole
- 14 – Context 36 – 3 bags – fill of posthole
- 15 – Context 50 – 1 bag – fill of posthole
- 16 – Context 52 – 1 bag – fill of posthole
- 17 – Context 54 – 2 bags – fill of hearth
- 18 – Context 56 – 2 bags – fill of shallow pit
- 19 – Context 57 – 2 bags – fill of shallow pit
- 20 – Context 61 – 1 bag – fill of posthole
- 21 – Context 59 – 2 bags – fill of posthole
- 22 – Context 63 – 2 bags – fill of shallow pit
- 23 – Context 73 – 2 bags – fill of posthole
- 24 – Context 81 – 2 bags – fill of shallow pit
- 25 – Context 71 – 2 bags – fill of hearth
- 26 – Context 83 – 2 bags – fill of large posthole or possible small pit
- 27 – Context 85 – 2 bags – fill of posthole
- 28 – Context 87 – 1 bag – fill of posthole
- 29 – Context 91 – 3 bags – fill of hearth
- 30 – Context 54(lower) – 1 bag (small) – fill of kiln

Project Design for Proposed Work at Cambusmore

This statement has been produced for the recommendations made in a report of trial trenching. The complete area is of a significance as to need further work before development starts.

Objectives

To undertake the open-area excavation of the complete area of the proposed development in relation to the proposed recommendations made (Farrell, 2001). A summary of the features noted in the trenches as part of the evaluation are as follows :

- 1 – pit with charcoal fill with shells (mussel, periwinkle and scallop)
- 2 – small pit
- 3 – agricultural ditch (possible field boundary)
- 4 – hearth with find of burnt bone and worked stone object in fill, posthole
- 5 – hearth
- 6 – small pit and 2 postholes
- 7 – couple of burnt deposits, number of postholes and possible entranceway for field.
- 8 – posthole
- 9 – burnt deposits and 2 postholes.

In a number of trenches were signs of agricultural improvements in the form of rubble field drains and infilled hollows with clearance material dating probably from the mid to late 19th century.

The features in the west end of trenches 6 – 8 probably relate to an earlier field system before the fields were improved, as they lay in a possible alignment, though this will be fully determined upon complete excavation.

Method

A watching brief will be maintained on the stripping of topsoil, by back-acting machine with a straight edged bucket, with all features being tagged for excavation. Topsoil will be made into an earth bund to be made over cropmark site to the southern edge of the excavation and to west site of excavation towards the A9 road.

All archaeological features and deposits will be fully excavated and recorded by using *pro forma* recording sheets and a continuous unique numbering system. All plans, sections, profiles and elevations will be drawn at 1:10, 1:20 and 1:50 as appropriate. Drawings will be made in pencil on permanent drafting film. The depth of all principal features and levels will be calculated in metres relative to Ordnance Datum. Plans, sections and elevations will be annotated with depths as appropriate. All features and sections will have photographs taken to produce a photographic record consisting of monochrome prints and colour slides. (The latter will be deposited with Highland Council Archaeology Unit)

Finds

Notification will be given to the Assistant Curator (Archaeology) at Inverness Museum and Art Gallery prior to any work being carried out and notice will be made immediately to the Assistant Curator (Archaeology) at Inverness Museum and Art Gallery for any conservation needs. A full record will be made of any on-site first aid treatments.

In the event of the discovery of human remains, the developer and appropriate authorities will be notified immediately. It will be necessary to enter into a separate agreement with the developer in respect to any additional work associated with human remains on the event of their discovery,

Spot samples will be taken from any suitable archaeological deposits for analysis of artefactual, economic and environmental data. All samples to be bulk sampled for flotation analysis. Samples also to be taken, where required, for C14 dating.

All finds and environmental samples will be processed according to procedures and guidelines on finds analysis, environmental sampling and archive preparation in accordance with the Institute of Field Archaeologists' *Guidelines for Finds Work*. The final report will contain an analysis of the finds and samples taken.

Product of the work

Artefacts recovered shall be liable to the process of Treasure Trove and notice will be given to the Queen's and Lord's Treasurer's Remembrancer. A copy of any report submitted will be copied to the Highland Council Archaeologist.

A data structure report, following the guidelines published by Historic Scotland will be prepared within four weeks of completing fieldwork. The report to be submitted to the Highland Council Archaeology Unit plus an additional paper copy will accompany the project archive on its deposition with the NMRS.

The Final Report to be submitted to the Highland Council Archaeology Unit within 6 months of the completion of work.

The final report is likely to include the following elements;

- Introduction to the Project
- Aims and Objects
- Methodology
- Results
- Evaluation of Significance
- Conclusion and Recommendations for Further Work
- Archive Location and Contents.
- Appendices
- Figures and Illustrations
- Catalogue of finds
- Analysis of finds and samples
- References

As part of the project a presentation of the results will be made to the local community within 1 year of the completion of the project. A summary of the results will be submitted to *Discovery & Excavation in Scotland*.

Archive Deposition

The project archive, including written, drawn and photographic elements (together with a summary of the contents of the archive) will be deposited with the National Monuments Record Scotland (Royal Commission on the Ancient and Historical Monuments of Scotland). The archive will be prepared in accordance with the requirements of the RCAHMS.

Timetable

A timetable of work will be submitted to the Highland Council Archaeologist before any work commences. Monitoring of the work will be at the discretion of the Highland Council Archaeologist or their agent.

Operational Factors

The archaeological contractor will at all times follow and confirm to the Health and Safety at Work Act 1974 and other various regulations and the Codes of Conduct and Approved Practice and Standards of the Institute of Field Archaeologists of 1999.

The archaeologist shall be responsible for ensuring own safety equipment. (Steel toe-capped boots, hard-hat and reflective clothing, to be worn at all times)

Staffing

Director – Stuart Farrell, 7 years as field archaeologist.

Supervisor – Ewen Rutter, 9 years as field archaeologist.

Site Assistants – yet to be determined

References

Farrell, S (2001) Cambusmore – Report of Archaeological Evaluation. Unpublished report.

IFA (1999) By-laws, Standards and Policy Statements of the Institute of Field Archaeologists. Reading.

Stuart Farrell
27/3/01

Specification for archaeological work at:

ARCHAEOLOGICAL EXCAVATION

**HIGHLAND COUNCIL
PLANNING AND DEVELOPMENT
SERVICE**

Archaeology Unit

1. Background

This specification has been produced in response to the need for an archaeological excavation to be carried out prior to the development of this site. It is for a minimum standard of work; a higher standard may be offered and accepted.

2. Terms of Reference

This specification is for archaeological recording work occasioned by planning application no. It is based on these documents. If these details are changed a new specification will be needed. It is valid until after which if no work has been carried out a revised specification will be needed.

The specification has been produced for who will be responsible for the work, including all tendering and contractual arrangements. Estimates should be obtained from archaeological contractors on the basis of this specification

Any reference to 'archaeologist' in this specification is to be taken to mean a qualified and experienced practitioner acceptable to the Senior Archaeologist. This is to ensure that work is carried out to professional standards. The project should be carried out by, or under the immediate direction of, a member of the Institute of Field Archaeologists or an archaeologist of equivalent standing.

Before site works commence, the proposed arrangements, including a timetable for the work must be agreed with the Area Planning Manager and the Senior Archaeologist in writing.

If this is for a road or water or sewerage proposal the area to be covered is the entire wayleave except where otherwise indicated.

3. Tendering

Tenders must be accompanied by a project design, statement and evidence of competence, including the CV of the Project Director, and other staff where possible.

4. Objectives

1. To record, to professional standards, any features and objects of archaeological importance, which will be damaged or destroyed by this development.

5. Method

An archaeological excavation will be carried out in line with the following principles. Contractors can suggest variations to these in their tender documents if desired.

An indicative budget for post-excavation work should be agreed with the archaeological contractor prior to the start of the excavation work. At the end of the fieldwork stage, proposals for post-excavation analysis and reporting should be presented to, and a programme for this work agreed by, the developer, the archaeological contractor and the Senior Archaeologist.

6. Monitoring

- The Senior Archaeologist will normally monitor projects to ensure that specifications are met.
- Monitoring will normally be by unannounced site visit. Alternative or additional monitoring arrangements may be made in individual cases.

- Prior notice of fieldwork starting dates, with contact names and local addresses, telephone numbers and directions and other arrangements for access must be given to the Senior Archaeologist by the archaeologist contracted.
- Any unexpectedly significant or complex discoveries, or any other unexpected occurrences or conditions which might affect the agreed project work or its timetable or cost must be notified immediately to the client and the Senior Archaeologist so that revised arrangements can be made.
- Where archaeological work fails to meet this specification the applicant will be in breach of the planning condition until matters are rectified.

7. Reporting

Project report

An initial report (Data Structure Report) must be produced, and will follow the Historic Scotland Guidelines for its content. It must contain proposals for post excavation work. Costings for the post excavation work must be produced as a separate document and submitted to the applicant only.

Five copies of this Data Structure Report must be produced.

- I. One paper copy for the applicant
- II. One paper copy for the Area Planning and Building Control Manager
- III. One paper copy for the Archaeology Unit, Planning and Development Service, Council Offices, Glenurquhart Road, Inverness IV3 5NX where it will be available for immediate consultation by the public.
- IV. One copy for the Highland SMR as above, on a computer disk in a format compatible with Microsoft Office 95 for Windows.
- V. One paper copy to be deposited with Norman Newton, Libraries Support Unit, 31a Harbour Road, Inverness.

The report must be submitted to the all of the above within weeks of the completion of the field work.

The report must include, as a minimum,

1. Location plan showing the project area and archaeological sites and features affected
2. Circumstances and objectives of this work, including a copy of this specification
3. Weather and other conditions affecting fieldwork
4. A brief analysis of the project results drawing in comparative data as appropriate, and a statement of the significance of the results for future research. Note that a negative result may itself be significant.
5. A set of colour slides illustrating the project progress from start to completion.

The completed report will be available for immediate public consultation for research purposes at the Highland Sites and Monuments Record. In addition, the Archaeology Unit reserves the right to make the report available for reference or research purposes, either on paper, or electronically.

Subject to this, copyright will remain with the author unless specifically transferred in writing, and the Archaeology Unit will assume author's copyright unless advised otherwise. Copyright will be acknowledged in all cases by the Archaeology Unit.

This specification includes arranging a presentation of the project results to the local community within a year of the completion of the fieldwork. Arrangements must be agreed with the Senior Archaeologist.

8. Treasure Trove

The Archaeological Contractor must liaise with the Assistant Curator (Archaeology) at Inverness Museum and Art Gallery prior to the start of fieldwork, regarding possible emergency conservation needs and future storage arrangements. The Assistant Curator will in turn notify the local museum of the fact that there is archaeological work ongoing in the area. Should museum staff wish to visit the site whilst the archaeological work is in progress, they must first gain permission from the site owner/agent. **The site owner/agent must be aware that no one, other than the Council's Planning Officer, in consultation with the Archaeology Unit, has the authority to vary the terms of this specification.**

Provision must also be made for a cataloguing system for artefactual material, which will be compatible with the needs of the institution receiving these finds. Any report to the Queen's and Lord Treasurer's Remembrancer must be copied to the Senior Archaeologist, and the Assistant Curator (Archaeology) at Inverness Museum and Art Gallery. Any finds, where appropriate, should also be reported to the Receiver of Wreck.

9. Discovery and Excavation

A brief summary of the results must be sent to the Council For Scottish Archaeology for inclusion in Discovery and Excavation in Scotland. The cost of this must be included in any tender document.

10. Post Excavation

Once the initial (Data Structure) report has been received by the applicant and by the Archaeology Unit, discussions will take place regarding the completion of this work, in order that the Planning Condition can be fulfilled archaeologically. These discussions will involve the Applicant, the Archaeological Contractor, the Highland Council Archaeology Unit and the Area Planning Manager. These discussions will agree a programme of post excavation analysis, a timetable for this work, and the form of the final report.

11. General

1. The archaeologist appointed must be of a professional standing acceptable to the Senior Archaeologist and must carry out the work according to the Code of Conduct, standards and guidelines of the Institute of Field Archaeologists.
2. The main contractor has responsibility for the Health and Safety of any archaeological staff on site.
3. The archaeologist is responsible for taking all necessary measures to conform with the Health and Safety at Work Acts and be covered by all necessary insurances.
4. Any Health and Safety incidents on site involving the archaeologist must be immediately notified to the Health and Safety Executive.

5. The archaeologist must agree a timetable for the work with the client and the Senior Archaeologist
6. The archaeologist appointed will not comment to the press or other media without prior approval from the Senior Archaeologist
7. Proper provision must be made for prevailing weather conditions in northern Scotland
8. The archaeologist agrees by undertaking this work to the terms of this specification.

Dorothy Low
Archaeologist
Tuesday, 27 March 2001

Project Design for Proposed Work at Cambusmore

This statement has been produced for the recommendations made in a report of trial trenching. The complete area is of a significance as to need further work before development starts.

Objectives

To undertake the open-area excavation of the complete area of the proposed development in relation to the proposed recommendations made (Farrell, 2001). A summary of the features noted in the trenches as part of the evaluation are as follows :

- 1 – pit with charcoal fill with shells (mussel, periwinkle and scallop)
- 2 – small pit
- 3 – agricultural ditch (possible field boundary)
- 4 – hearth with find of burnt bone and worked stone object in fill, posthole
- 5 – hearth
- 6 – small pit and 2 postholes
- 7 – couple of burnt deposits, number of postholes and possible entranceway for field.
- 8 – posthole
- 9 – burnt deposits and 2 postholes.

In a number of trenches were signs of agricultural improvements in the form of rubble field drains and infilled hollows with clearance material dating probably from the mid to late 19th century.

The features in the west end of trenches 6 – 8 probably relate to an earlier field system before the fields were improved, as they lay in a possible alignment, though this will be fully determined upon complete excavation.

Method

All archaeological features and deposits will be fully excavated and recorded by using *pro forma* recording sheets and a continuous unique numbering system. Other plans, sections, profiles and elevations may be drawn at 1:10, 1:20 and 1:50 as appropriate. Sketches may augment plans. Drawings will be made in pencil on permanent drafting film. The depth of all principal features and levels will be calculated in metres relative to Ordnance Datum. Plans, sections and elevations will be annotated with depths as appropriate. Where appropriate, photographs will be taken to produce a photographic record consisting of monochrome prints and colour slides.

Finds

Notification will be immediately given to the Assistant Curator (Archaeology) at Inverness Museum and Art Gallery for any conservation needs. A full record will be made of any on-site first aid treatments.

In the event of the discovery of human remains, the developer and appropriate authorities will be notified immediately. It will be necessary to enter into a separate agreement with the developer in respect to any additional work associated with human remains on the event of their discovery,

Spot samples may be taken from suitable archaeological deposits for analysis of artefactual, economic and environmental data. All samples to be bulk sampled for flotation analysis.

All finds and environmental samples will be processed according to procedures and guidelines on finds analysis, environmental sampling and archive preparation in accordance with the Institute of Field Archaeologists' *Guidelines for Finds Work*. The completed report will contain an analysis of the finds and samples taken.

Product of the work

Artefacts recovered shall be liable to the process of Treasure Trove and notice will be given to the Queen's and Lord's Treasurer's Remembrancer.

A report will be prepared within four weeks of completing fieldwork. The report to be submitted to the Highland Council Archaeology Unit plus an additional paper copy will accompany the project archive on its deposition with the NMRS.

The final report is likely to include the following elements;

- Introduction to the Project
- Aims and Objects
- Methodology
- Results
- Evaluation of Significance
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- Archive Location and Contents.
- Appendices
- Figures and Illustrations
- References and Bibliography

Archive Deposition

The project archive, including written, drawn and photographic elements (together with a summary of the contents of the archive) will be deposited with the National Monuments Record Scotland (Royal Commission on the Ancient and Historical Monuments of Scotland). The archive will be prepared in accordance with the requirements of the RCAHMS.

Operational Factors

The archaeological contractor will at all times follow and confirm to the Health and Safety at Work Act 1974 and other various regulations and the Codes of Conduct and Approved Practice and Standards of the Institute of Field Archaeologists of 1999.

The archaeologist shall be responsible for ensuring own safety equipment. (Steel toe-capped boots, hard-hat and reflective clothing, to be worn at all times)

Staffing

Director – Stuart Farrell, 7 years as field archaeologist.

Supervisor – Ewan Rutter, 9 years as field archaeologist.

Site Assistants – yet to be determined

References

Farrell, S (2001) Cambusmore – Report of Archaeological Evaluation. Unpublished report.

IFA (1999) By-laws, Standards and Policy Statements of the Institute of Field Archaeologists. Reading.

Stuart Farrell
23/3/01

STUART FARRELL

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H.C. PLANNING AND DEVELOPMENT SERVICE		
26 MAR 2001		
CR	CR	24/2
DC	DC	26/3
HILL ROAD		

Phone/Fax: 01667 - 451037
Mobile: 07801 - 275237
email: stuart_farrell@lineone.net

23 - 3 - 2001

Cambusmore Quarry - Archaeological Work

Dear Dorothy,

I am writing to you with regards to the above.

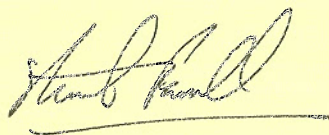
Please find enclosed report per the archaeological evaluation, with enclosed slides, and black & white photographs.

I would wish to draw to your attention the attached project design per the recommendations made in the enclosed report. I would ask if you could give this your immediate attention, per any comments, as it is hoped to carry out the required work as soon as possible.

A timetable is yet to be determined, given certain factors such as the current foot & mouth restrictions, though it is hoped to resume work starting the week beginning Monday 2nd April with the site being stripped and excavation work starting on the 9th of April.

I hope you find the enclosed satisfactory, and if you have any queries please do not hesitate to contact me, I look forward in hearing from you in the future.

Yours Sincerely



Stuart Farrell

Enclosures

Stuart Farrell
39A Park Street
Nairn
IV12 4PP

Please ask for: Dorothy M Low
Direct Dial: 01463 702280
E-mail: Dorothy.Low@highland.gov.uk
Your ref:
Our Ref:
Date 27 March 2001

Dear Stuart,

CAMBUSMORE QUARRY

Many thanks for your initial report on the archaeological evaluation and Project Design for further work. As I expected, significant archaeological remains have been revealed by the evaluation, and these will require further archaeological work to preserve them by record.

I have had a close look at your project design, and have the following comments to make.

Firstly, I would like that Granit Union explore the potential for leaving the area around the recorded crop mark unworked. Your report indicates that trench number 1 contains prehistoric remains, and I would prefer to see these preserved in situ, within an appropriate buffer zone around the crop mark.

Method

Secondly my comments refer to your proposed method. I am concerned by the use of the word may in your paragraph headed "Method" This implies that there is a possibility that all sections, profiles, elevations and drawings would not be drawn. The Highland Council requires the scale drawing of all of the above. We also require photographs to be taken of all features, sections, profiles etc.

Finds

As you know we require that you notify the Assistant Curator prior to the start of any work to inform the Museum of the fact that the work will be ongoing.

Samples should be taken from as many of the features as possible, to allow for dating and environmental analysis.

Product of the work

The initial product will require to be a Data Structure Report, following Historic Scotland Guidelines. Once this has been produced I think it is extremely likely that a full post-excavation report will require to be produced in view of the significance of the archaeological remains on site. This will require to be submitted to us within 6 months of the production of the Data Structure report. It may be that a publication of the report in a suitable journal will be required.

I enclose a copy of our standard requirements for work such as this - where you have not mentioned any of these in your own Project Design, we require them to be added. I look forward to receiving a revised project design from you, which also details how you propose to deal with the earth moving involved in stripping of the whole site.

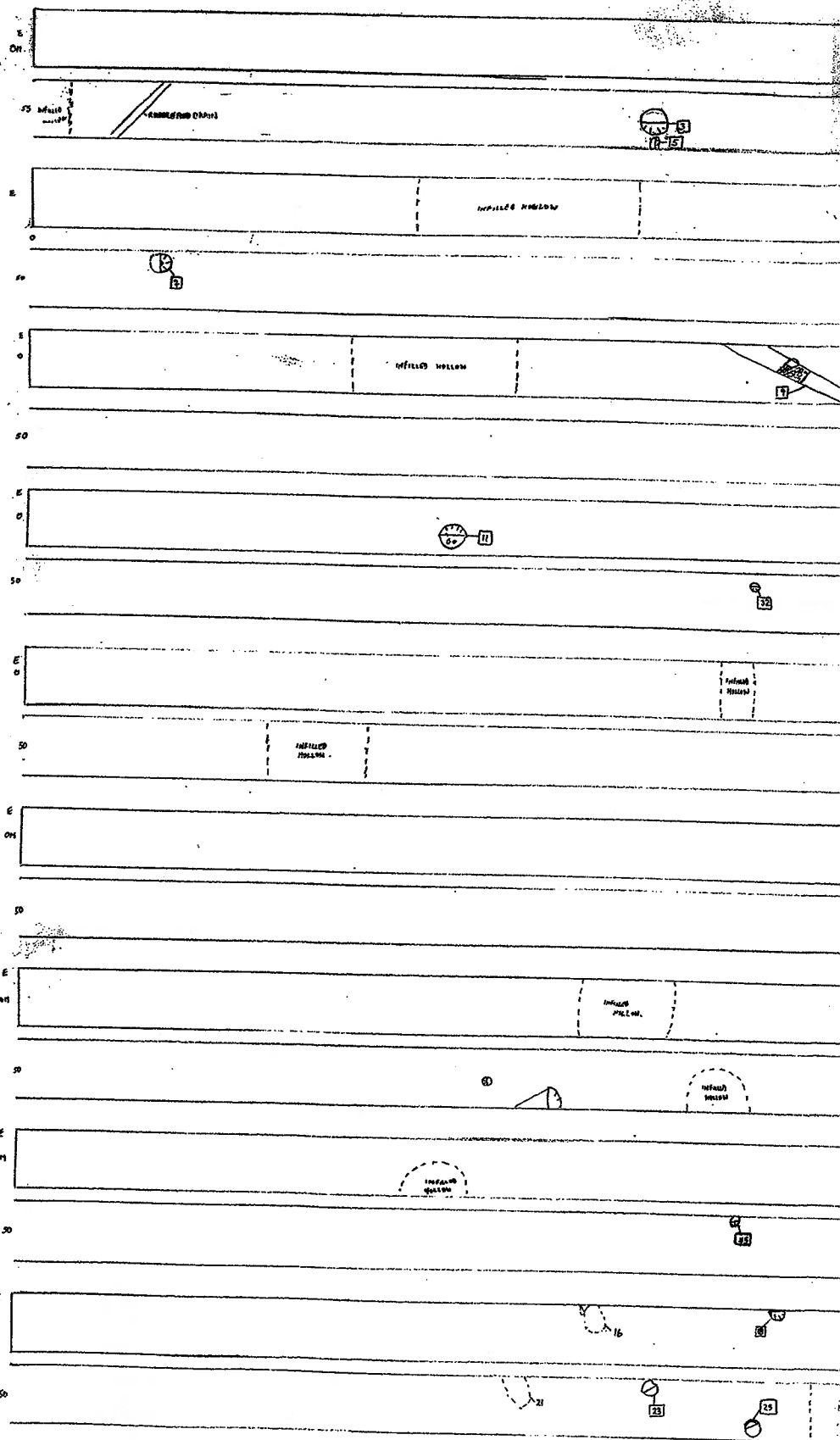
I understand that Granit Union hope to start work soon, however, as you know, no archaeological work can be undertaken until we have agreed your revised Project Design. I look forward to receiving this as soon as possible.

Yours sincerely



PP
Geoff Robson
Head of Environment

cc Granit Union fno Phil Gurr



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TRENCH 7

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TRENCH 9