

**Langdale/ Scafell Pike
Neolithic Axe Factory**

Management Project

Interim Report 1990/ 1991

National Trust

**LANCASTER
UNIVERSITY
ARCHAEOLOGICAL
UNIT**



May 1991

Langdale/Scafell Pike Neolithic Axe Factories
Interim results of Archaeological fieldwork 1990

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Introduction

The axe factories around the Langdale Pikes are on an unstable terrain and are vulnerable to even limited amounts of erosion; this coupled with an increasing use of the area by walkers and climbers has meant that many of the sites are under severe threat. In response to the deteriorating condition of the sites, the National Trust in conjunction with the Lancaster University Archaeological Unit set up a management programme in 1984, of which the first stage was a complete topographic survey of all the working sites.

This, the second phase of the programme, was planned in consultation with English Heritage, Cumbria County Council and the Lake District Special Planning Board and was jointly funded by English Heritage and the National Trust. It had two main aims: to set up a monitoring programme for all sites and to repair the sites on foot-paths which are under the most immediate threat.

The results of the 1990 fieldwork are summarised within three individual reports:

Management and Survey Programme	-	J.Quartermaine
Excavation Programme	-	P.Tostevin
Path repair Programme	-	R.Wilson

Management and Survey Programme Report

J. Quartermaine

The condition of the sites is not deteriorating uniformly throughout the area; pockets of severe erosion are sometimes found adjacent to sites in a static condition. It is, therefore, necessary to monitor the condition of all sites in order to target the management resources towards working sites in greatest need. To this end a photographic data base was established to provide a record of the site condition in 1990. The sites were photographed from recorded locations in order to show the area around the working floor; in some cases the extent of the run-off was also photographed but because of the large number of sites (>570) it was not found to be expedient to do this at all sites. Apart from a small group of sites on Scafell Pike, all axe factory sites were photographed during this season.

On Top Buttress, an area particularly vulnerable to forces of erosion, additional methods of monitoring were attempted. Flakes were painted and set in a line across the mobile scree slopes of sites 98 and 94; they were set between two pegs which were placed at the edge of the vegetation cover. It should thus be possible to record any movement of the scree material, and any change in the extent of the vegetation cover. If this experiment proves effective it will be applied to other sites on Top Buttress and Harrison Stickle.

During the project 24 working sites were discovered which had not been recorded during the 1985 & 1984 survey seasons. In almost all cases these had been exposed as a result of erosion, highlighting the seriousness of the problem. They were mostly on foot-paths, but there were two large areas of waste material that have been recently exposed on Top Buttress; these are remote from any paths and there is no obvious explanation for the dramatic decrease in vegetation cover. All new sites have been surveyed and added to the 1:1000 survey base.

A small number of sites are now completely destroyed as a result of the erosion:

Site 115 in South Scree was a high concentration, stratified deposit of waste material opposite the cave (116). It had been protected from erosion by a large boulder immediately up-slope, but now the boulder has been dislodged and the worked material has been spread down the gully. There is no longer a significant concentration of worked material in this area.

Site 168 on Harrison path was a low concentration site within one of the path erosion gullies, but now the gully has expanded and there is no longer any worked material *in situ*.

Sites 191 & 192 were adjacent to the Stickle Tarn/Harrison Stickle path which has expanded enormously since the original 1984 survey. No worked material is now visible at the reported location, however this may be because the erosion has caused a deposition of natural overburden on top of the sites.

Foot Path Surveys

Sites exposed by foot-paths are deteriorating in condition at an alarming rate and are in need of the most immediate attention. It was decided to align new foot-paths approximately on the line of the existing paths, so as to prevent the exposure and destruction of

further sites presently obscured beneath turf. The main areas of debitage have been avoided but where it was impossible to avoid known sites, excavations were necessary to record any archaeological deposits. It was realised that the 1:1000 survey from the first phase was generally inadequate for the needs of the proposed excavation and repair work, so further 1:250 surveys were undertaken at all the path site groups. With the completion of the path repair programme, the surveys will be the only record of the extent of the flake scatters.

Surveys were undertaken at Harrison Path, Thorn Crag & Harrison Combe. They were accurately tied in to the national grid by traverse from the High Raise triangulation point, and permanent survey markers were placed at all the path groups. The surveys recorded the extent of the flake scatters, the excavation trenches, the extent of the path erosion, the lines of the proposed paths, crags, streams, bogs, and 1m contours.

Excavation Programme Report

P.Tostevin

Four small scale rescue excavations were undertaken of sites on the line of the new path. These recorded the axe working deposits prior to their destruction by path repair work, defined the limits of the sites and the extent of the potential disturbance to the sites.

Trench 1 (site 174, sized 3m x 2m): Turf cover survived only on the north side of the trench beneath which there was a thin layer of peat almost devoid of worked material. Below the peat there appeared to be two distinct layers containing large quantities of worked material. The upper of these was also humic while the underlying one was more clay-like and continued underneath the loose scree and gravel that existed where the turf had been eroded. At the west end of the trench there were dense patches of extremely small flakes possibly indicative of a fine working floor, whereas towards the east end the scatter of worked material was less dense and there were fewer small flakes.

Trench 4 (site 174, sized 2m x 1m): Because the full extent of the site was still unknown, another trench (4) was excavated to the west of the first. It had a similar stratigraphic sequence and again there was a wealth of worked material across the whole trench, more dense in some areas than others. A large, relatively flat stone (at least 0.90m by 0.50m) protruded from the east and south facing sections at the west end of the trench. There were a few dense scatters of small worked flakes around and partly covering the stone which may indicate that it was used either as an anvil stone or a seat.

Despite the excavation of these two trenches, neither a southern or western limit to site 174 has been discovered; it does however confirm original suspicions that the site was considerably larger than was apparent from the surface scatter.

Trench 2 (site 226, sized 5m x 1.5m): The working floor was severely damaged by path erosion; only a small amount of *in situ* material remained underneath the turf at the edge of the site. Some of the unstratified material found in the surface scree might have been run-off from another site. Almost all of the surviving elements of the working floor were within the confines of the trench, however the small remaining part outside the trench will probably be completely destroyed by path consolidation work.

Trench 3 (171, sized 1.50m x 5m): The trench was located in order to investigate a small flake deposit in an exposed section at NY 2831807123. Underneath the turf and loose scree there were peaty layers containing some worked material with a marked concentration in the middle of the trench extending into the south-facing section. It can reasonably be assumed that the limits of this site had been defined by this excavation.

These excavations suggest that the proposed course of the new path will cause the destruction of parts of the above sites, especially site 174 where the working floor was found to extend far beyond the limits of the surface scatter. However, the consolidation of the rest of the path will conserve many more sites and will minimise the destruction.

Foot path Repair Programme Report

R.Wilson

Following survey work carried out by the Archaeological Unit at Lancaster University, work began on Harrison Stickle Path with the aim of establishing a line for the path and consolidating and protecting the known sites.

Site 206 was protected with large stones and a turf covering. In order to reduce the width of the bank and to control further erosion, buttressing, infilled with turf, was used above site 206. This had the added bonus of reducing peoples 'interest' around the protected site.

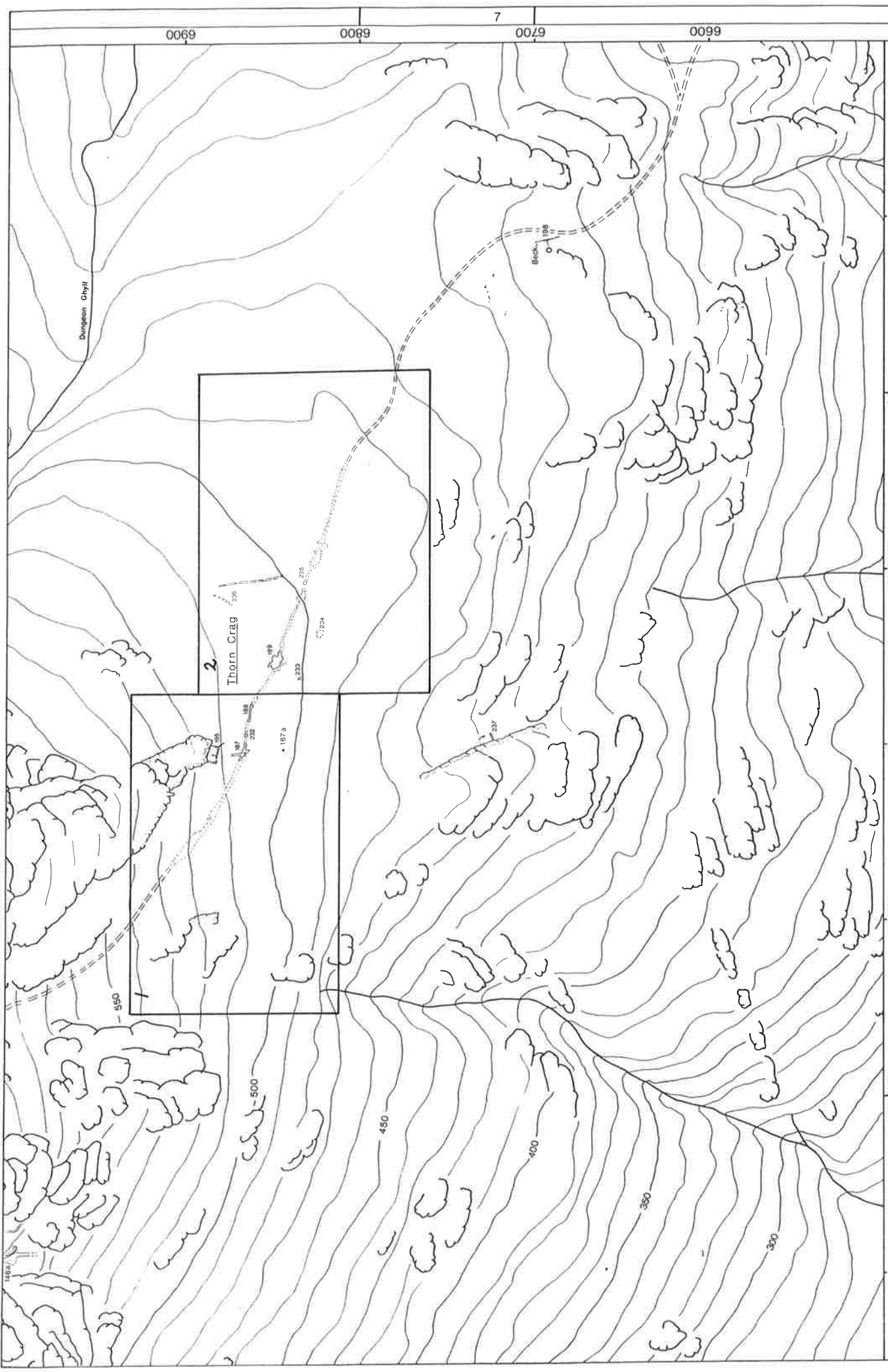
Sites 227, 205, and 228 were then covered with graded stones (c.4" diam.). The area was then covered with turf.

This technique proved successful and was therefore used to protect sites 174 and T.4.

In consultation with archaeologists from L.U.A.U. a large pitched drain was built across the top of the turfed area to prevent further water erosion.

The deep gullies above this, containing sites 169, 171, 172 and 173 were filled with graded stones. This work was finished too late for this years growing season, and it was decided to leave this area as it is suitably protected from further damage or interference. It is proposed to return to this area in Spring 1991 and to cover it in soil and turf.

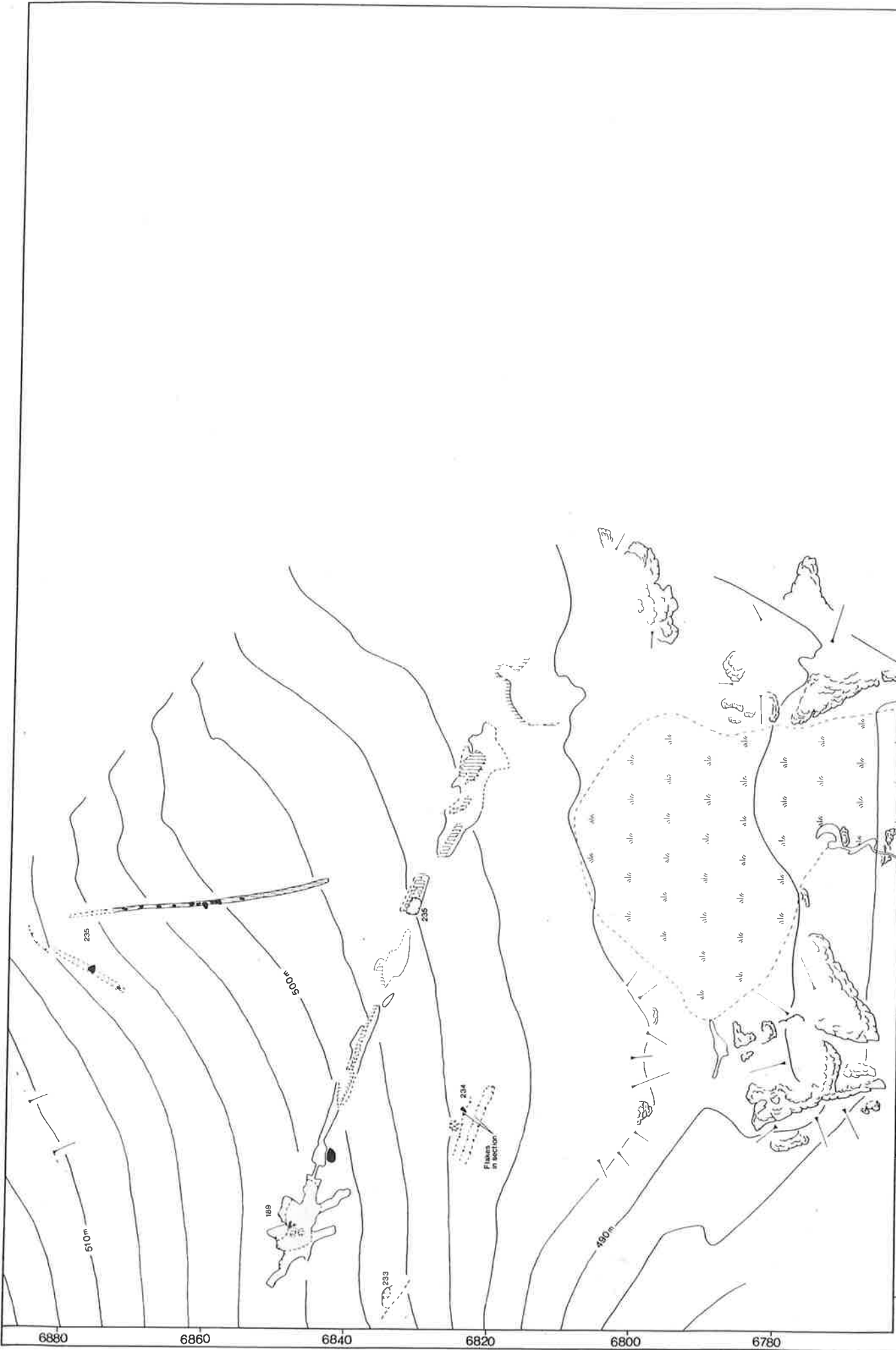
The path above Trench 3 has been pitched up the incline and a waterbreak incorporated to try to alleviate the damage caused by water.



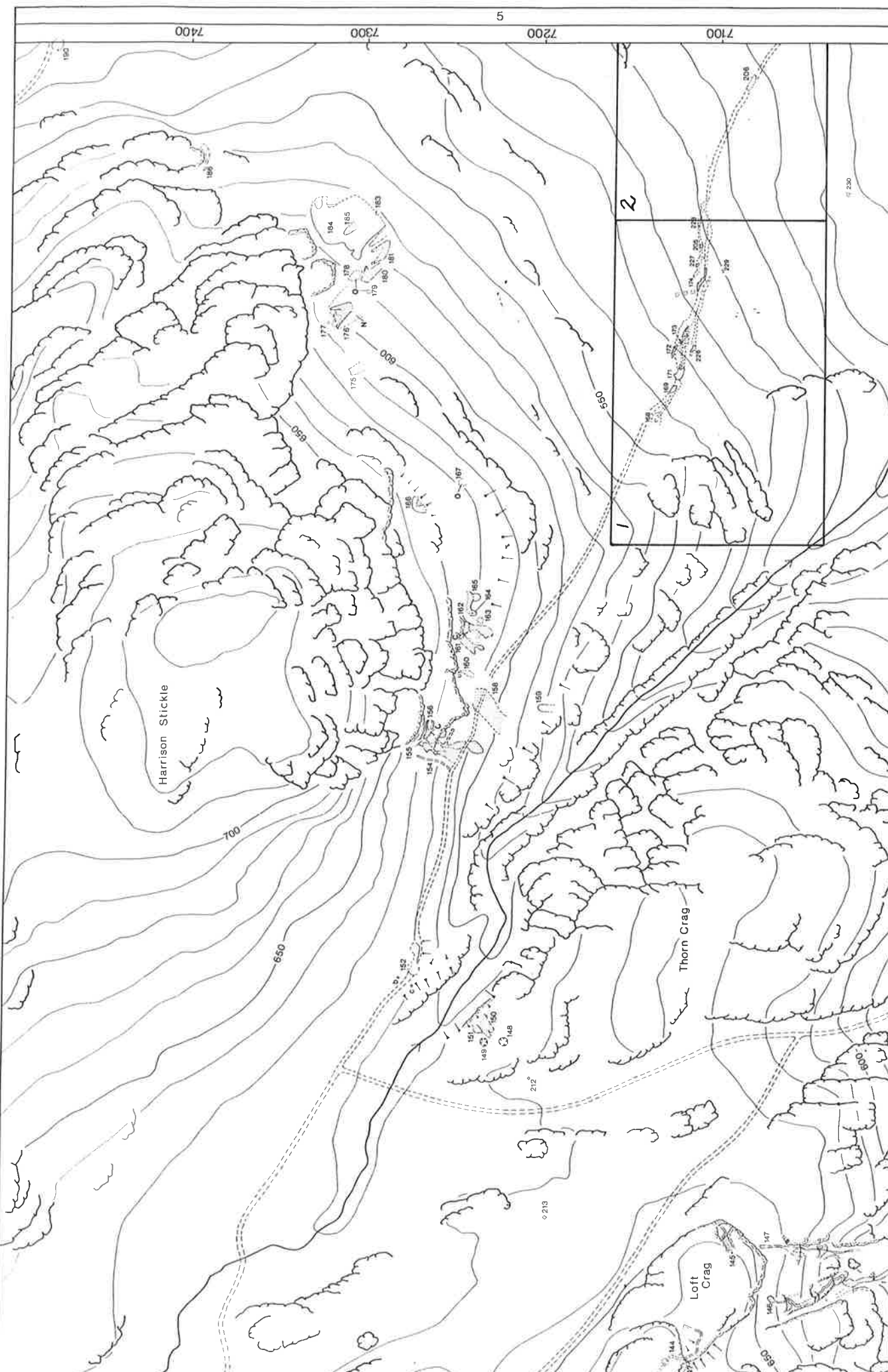
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CUMBRIA & LANCASHIRE ARCHAEOLOGICAL UNIT			LANGDALE/SCAFELL PIKE AXE FACTORY SURVEY		Topographic detail is based upon the Ordnance Survey 1:50,000 map with permission of the controller of Her Majesty's Stationery Office. Crown copyright reserved. Copyright of the Ordnance Survey is acknowledged and may not be republished without permission from the authors.	
THE NATIONAL TRUST			PLAN No. 8	PLAN NAME THORN CRAG	DATE 7 1984	



27960	27980	28000	28020	28040	28060	28080	28100	28120
LANGDALE AXE FACTORY MANAGEMENT SURVEY		THORN CRAG		COMMENTS Key	Sites Vegetation Cairn	Scale 30m	DRAWN BY JQ	SCALE 1:250
							DATE 4-1990	SITE CODE
							LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT	
							SHEET No. 1	



28140	28150	28180	28200	28220	28240
LANGDALE AXE FACTORY MANAGEMENT SURVEY			THORN CRAG		
PLAN NAME			COMMENTS		
			Key Vegetation Cairn Sites Coarse scree		
			DRAWN BY JQ & SQ		SCALE 1:1000
			DATE 4-1990		SITE CODE
			LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT		SHEET No 2



27900 28000 28100 28200 28300 28400
 7100 7200 7300 7400

CUMBRIA & LANCASHIRE ARCHAEOLOGICAL UNIT
 THE NATIONAL TRUST

LANGDALE/SCAFELL PIKE AXE FACTORY SURVEY
 PLAN No. 5

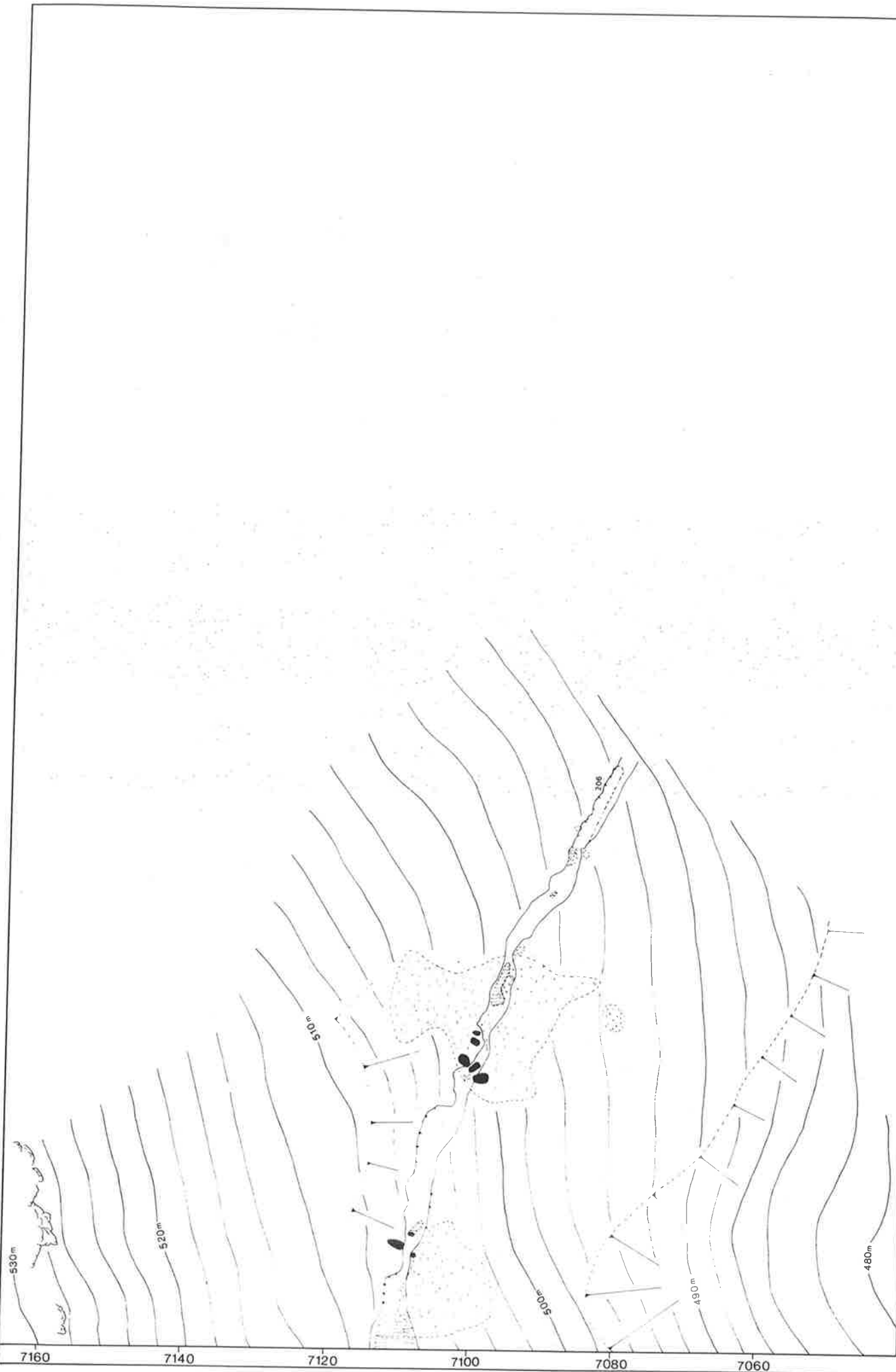
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DATE 6 1984

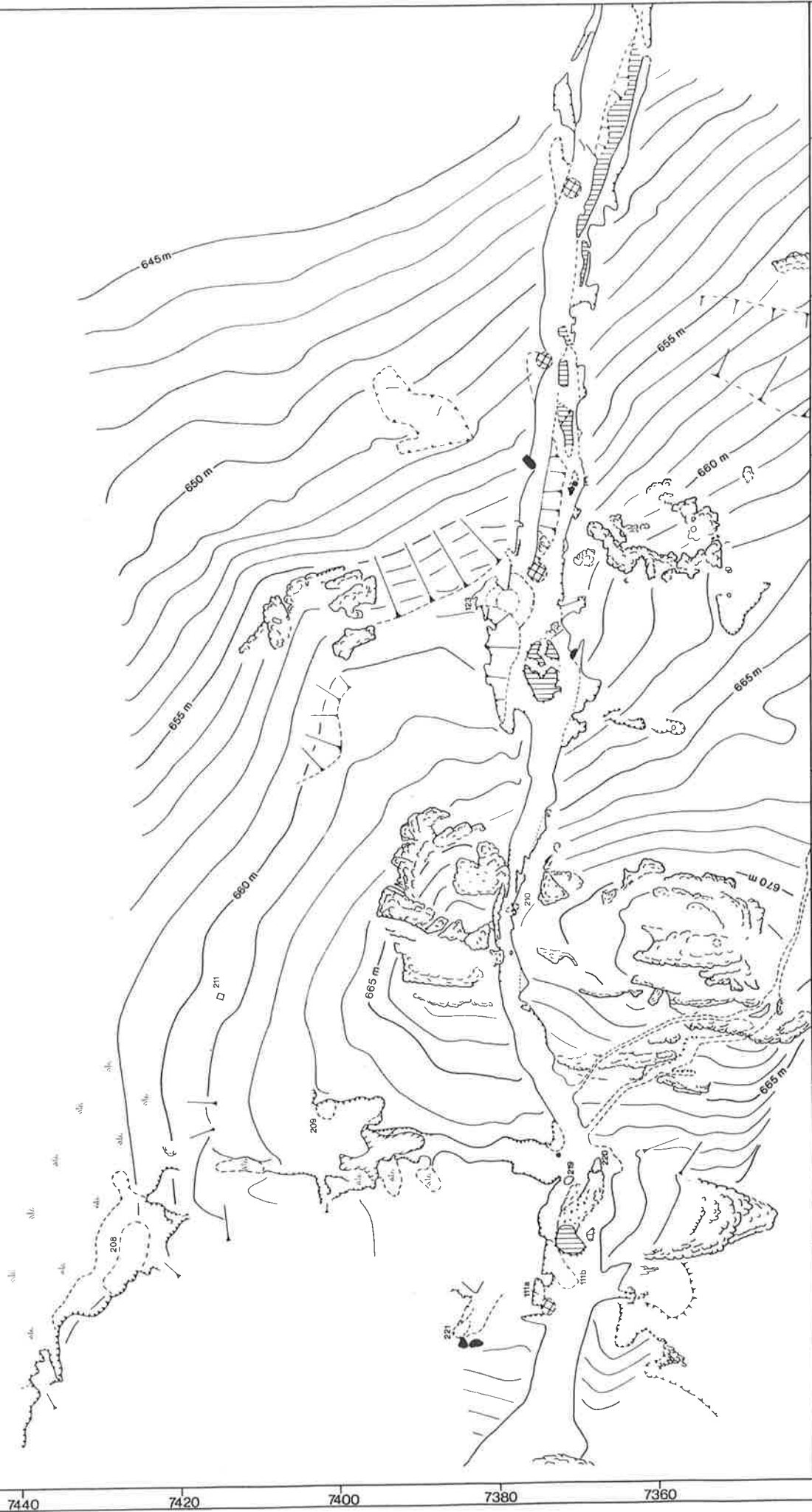
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28220	28260	28300	28340	28380
LANGDALE AXE FACTORY				
MANAGEMENT SURVEY				
PLAN NAME		COMMENTS		
HARRISON PATH		Key		
		Sites		
		Vegetation		
		Cairn		
		Pits		
		Cores		
		acres		
		Scale		
		1:250		
		Site Code HP 90		
		Sheet No. 1		
		Date 5-1990		
		Drawn by JQ PT SQ		
LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT				



28420		28440		28460		28480		28500	
LANGDALE AXE FACTORY		HARRISON PATH		HARRISON PATH		HARRISON PATH		HARRISON PATH	
MANAGEMENT SURVEY		HARRISON PATH		HARRISON PATH		HARRISON PATH		HARRISON PATH	
PLAN NAME		HARRISON PATH		HARRISON PATH		HARRISON PATH		HARRISON PATH	
COMMENTS		Key		Key		Key		Key	
Site		Vegetation		Cairn		Coarse scree		Coarse scree	
DRAWN BY		JQ		PT		SQ		SCALE	
DATE		5 - 19 93		5 - 19 93		5 - 19 93		1:250	
LANCASTER UNIVERSITY		ARCHAEOLOGICAL UNIT		ARCHAEOLOGICAL UNIT		ARCHAEOLOGICAL UNIT		SITE CODE	
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27460		27480		27500		27520		27540		27560		27580		27600		27620	
LANGDALE AXE FACTORY																SCALE 1:250	
MANAGEMENT SURVEY																SITE CODE	
PLAN NAME HARRISON COMBE																DRAWN BY JQ	
																DATE 5-1990	
																RED	
																SHEET NO. 1	
LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT																	