

REPORT OF ONE DAY RECONNAISSANCE OF

PM 6 AREA,

SAUGBRUGSFORENINGEN,

HALDEN

Archaeologist responsible: Sheila Dawn Coulson
Accompanying Archaeologist: Birgitte Skar

As was recorded earlier, by the present author, a number of questions have recently been raised regarding the nature of the deposits and the boundaries for the localities of the Stone Age sites in the PM 6 area, of Halden (see summary of investigations prepared for the Fornminneutvalg on The PM 6 Area, Saugbrugsforeningen, Halden, by Sheila Coulson). A one day tour was made to this area, on 20 June, in an attempt to supply more detailed information on these subjects, for the Fornminneutvalg meeting scheduled for the following day. It was also anticipated that this information could be of use in preparing for the future investigations on these localities. The following is a report on the findings and the results of this excursion.

Due to the important nature of this case it was considered essential to gather as much information as possible in the limited period of time available. Therefore, a request was made, by the present author, for a second Stone Age specialist to view the area and offer a second opinion on the matters under consideration. On the 16th of June it was proposed to the museum bestyrer, Egil Mikkelsen, that Birgitte Skar, head of the Stone Age section of the Hurum Project, should accompany the present author on the one day excursion. This request was approved.

The prime objectives of this tour were as follows:

1) To view the stratigraphic deposits in the test pits for indications of natural grading of materials by size.

2) To see if there was any suggestion, within these same deposits, of redeposition through natural agents.

3) To obtain more detailed information on the boundaries between the sites, which were defined by the second investigator (see report of Ove Olstad).

4) To attempt to verify reports, from a previous investigation, on the occurrence of a Stone Age house ground, on Locality 3 and evidence of a cultural

layer in test pit 26, on Locality 1 (see report of Ove Olstad).

5) To establish a strategy for further investigations that would supply adequate information to allow a plan to be formulated for future excavations.

On the 20th June four hours were spent in the area of Localities 1, 2, 3, 4, 6, 8 and 9 and two and a half hours were spent at Locality 5 (Hoytomt). All of the test pits were relocated and examined and two new test pits were dug (No. 49 on Locality 2 and No. 14 on Locality 5). In addition, a number of presumably negative test pits were found that had not been marked on the map. These were also examined.

PM 6 Locality 6

This area was visited on the way to three of the main localities under immediate consideration (ie. 1, 2 and 3). Material was collected from the cultivated area near negative test pit No.1. (See Polaroid photo). As can be seen on the map, from Olstad's report, the site is divided by a deep stream bed that runs parallel to the cliff face, which forms the western boundary for this entire area.

PM 6 General area of Localities 4, 8 and 9

These areas, which are located immediately north of the zone slated for destruction, are part of the flatter region at the base of a slope that runs south from Locality 6. This natural slope becomes much more abrupt in the area of Localities 1 and 2 (see Polaroid photos). The entire area is cut by the aforementioned stream bed to the west. The silty damp deposits and the gently sloping banks of this stream indicate that it is obviously much wider during the wetter periods of the year. A second stream bed, which is located at the base of a rocky drop off, forms the eastern boundary for this region.

The soil throughout this area is sandy and is mixed with water deposited silts. It can be anticipated that these soils were deposited by water action. The lithics recovered are concentrated in areas where small clusters of stones have prevented their removal. The deposits are naturally graded by size. There are no indications of any cultural layers, fire-cracked rocks or in situ knapping debris.

No rational could be determined for delineating separate sites in this area. The present boundaries were established by combining the occurrence of natural boundaries with the patterning of positive and negative test pits (see Olstad, page 2). Olstad's map, showing these boundaries, is misleading in its depiction of a 30-40 meter division between sites 8 and 9 and 4.

PM 6 Localities 1 and 2.

There appears to be no justification for the division of this area into the separate Localities 1 and 2. The stream divides this region, as it does on Locality 6. The deposits are consistent throughout this entire area (ie. Localities 1, 2, 4, 8 and 9) with sandy/silty soil being found in all of the pits. Test pits with increased numbers of finds are also located in areas with higher numbers of natural rocks in the deposit. As was previously noted the rocks would have inhibited the removal of the humanly struck materials.

A new test pit, No. 49, was dug on the lower slope at the 'front' of Locality 2. Four small pieces of flint were found wedged between rocks, which first appeared approximately 20 cm below the surface. As was previously noted the finds were in variable condition and were fractured (see summary of investigations by Coulson). There was no indication of a cultural layer and no fire-cracked rocks. The overall deposit showed clear signs of natural grading by size. Flecks of charcoal were found throughout the deposit, thereby yielding further evidence for the reworking of this soil. This phenomena was noted in a number of the test pits.

A cultural layer was reported to occur below the deposits which contained the finds in test pit No. 26, on Locality 1 (see Olstad, drawing 1). This layer is dark because it is wet. The water would appear to be draining naturally from the cliff face immediately to the west. This layer does not contain fat - the standard finger test for this produced only dirt with no indication of the staining qualities of fat. The fire-cracked rocks which were reported are not fire altered but are naturally deteriorating - this process is exacerbated by the proximity of the stream.

Conclusions: The general topography of this entire area (ie. Localities 1, 2, 4, 8 and 9) and the homogeneity of the deposits would indicate that the present boundaries for these sites are hypothetical. The area is naturally limited to the west by a cliff face, to the east by a rock drop off leading to an old stream bed, to the north

by the rising slope of land up to Locality 6 and to the south by the increasingly abrupt slope. All evidence obtained from the deposits from the test pits indicates that the soils are naturally graded and reworked. The stream that runs parallel to the western cliff face is a likely source for some of this activity. Further testing will determine if this area was also affected by ancient water action. This testing is also essential for the determination of 'site' boundaries.

Suggested course of action: It is recommended that a trench, of approximately 100 meters in length, be dug by machine from the rock face, near test pit 20, to the rock ledge that occurs just before the present western boundary for Locality 3 (see enclosed map for suggested location). This could follow the upper limit of the proposed area for building. This trench would then intersect a number of the test pits and allow the existing surveying lines for construction to be used. It is further suggested that shorter trenches be cut every 20 meters, which are oriented perpendicular to the main cut, to determine the role played by the ever increasing slope in this area.

On the basis of the results from the test pit investigations it has been determined that the deposits are naturally sorted in a vertical direction. Therefore, since none of the materials are in situ it is justifiable to use a machine to cut these trenches.¹ The fill could be placed on one side of the cut, then sieved to retrieve the finds and finally removed. The opposite side of the trench could be cleaned and faced. Areas of particular interest could then be excavated in the normal manner from this cutting.

This procedure would then produce the maximum information, in the minimum period of time with the least amount of destruction to the site. If areas of undisturbed deposits should be found, the working grid system established from the trenching could be easily modified into a permanent grid.

¹ Note: There were indications that earth moving machinery has previously been used in this area. Therefore, there would appear to be no particular cause for concern regarding unnecessary disturbance of the area through the use of large machinery. (This situation would be altered if there was an excessive amount of rain immediately prior to the commencement of further investigations). Trees would have to be removed for the excavation of the trench. Time saved in digging would justify the additional removal of vegetation to permit a earth moving machine to enter the area from the north.

PM 6 Locality 3

A re-examination of the deposits and topography on this locality indicate that is the only site within this area to be naturally delineated. Large boulders and a rocky shelf provide limits to the north, east and west. The southern section of the site drops off sharply toward what would have been a small enclosed bay (see Polaroid photos).

Unfortunately, this is also the area which is richest in finds and the most clearly graded. It is without question that the deposits of this site are graded naturally in a vertical direction. Further testing will determine if they are also horizontally disturbed.®

Cleaning of one wall in test pits 5 and 6 yielded some additional finds. Unfortunately, there was no indication of a cultural layer, and the finds do not suggest that there is any material from in situ knapping. The variable condition of the material, the high number of different types of flint and chert and the negative results from attempts to refit the test specimens, further suggests that this material has been reworked naturally.

There was no obvious indication of a Stone Age house ground on this locality. It is suggested that further details regarding this occurrence be obtained from Ove Olstad.

Suggested course of action: It is suggested that this locality could also be more fully tested by the cutting of a trench. This could be oriented in the same direction as the one for testing Localities 1 and 2, but positioned approximately 5 meters further to the south

® Note: This phenomena of natural grading by size can be most clearly demonstrated by using an example. At the suggestion of the bestyrer, Egil Mikkelsen, the present author examined the finds from the Mesolithic locality of Frebergsvik. Here the finds were also recovered from a 20-30 cm deposit. The materials from the excavation line 'H' were chosen for examination.

The finds from this section of the site are of a very consistent character with medium to heavy patination, with some evidence of ridgewear and some indications of natural deterioration of the material. However, the lithics are not highly fragmented, obviously could be refitted and are clearly not graded by size from any reworking of the deposits. There is a clustering of the material around Layer II, with some materials also being found in Layers I and III.

(see enclosed map for suggested location). As this area has greater potential for yielding reliable information it is suggested that this trench be cut by hand (possibly with a krafse). An additional trench, positioned perpendicular to the main cut which runs through test pit 29, could also supply essential information on the connection of this area to the other localities. In addition, it would provide the information necessary to determine the role the slope may have played in the reworking of these materials.

'Hoytomt' - Locality 5

From the visit to this locality it was determined that the site was banked to the west by a steep rock cliff and to the east by a stream bed. The northern section of the area is a rock fall zone and the southern section is substantially altered by modern cultivation. Samples of bone and egg shell were found to have been added to the cultivated soil and were incorporated in the deposit with the lithics. When this beach was occupied during the Stone Age there would appear to have been a flat area nearest the water front. To the north of this zone there is a relatively steep slope (See plates of Polaroid photos).

The deposits in the test pits indicate that they are naturally graded by size. A new test pit, No. 14, yielded two larger pieces of flint and one chip which were lodged between larger rocks. There was no indication in any of the pits of a cultural layer, no fire-cracked rocks and no evidence of in situ knapping debris. The material was, as previously noted, in variable condition indicating redeposition. The natural grading of the deposits would support this view.

Suggested course of action: To determine the nature of these deposits, and the amount of disturbance in the flatter area to the south, it is recommended that a trench be dug from north to south (see enclosed map for suggested location). As the more probable area of habitation is already heavily, if not totally, disturbed by cultivation it is recommended that the trench be dug by machine. The deposits could be set to one side and sieved for the finds and the opposite side could be cleaned and faced. It is further recommended that the trench be approximately one meter wide as the sandy deposits are obviously prone to slumping.

Work plan: Providing that the areas recommended for further immediate attention are cleared, and that a digging machine is available, the suggested course of testing should proceed quite quickly. It is essential

that the crew becomes familiar with the deposits so that any alteration in the nature of the soil can be noted immediately (for example, the occurrence of undisturbed deposits or possible activity areas). It is particularly essential that the excavation and interpretation of these areas proceed at an identical rate. This is vital for the process of establishing a further course of action.

It is estimated that a crew of ten archaeologist and one field leader and/or project leader could accomplish this task in the allotted period of time (ie. from 7 August until the 1 October, 1989).

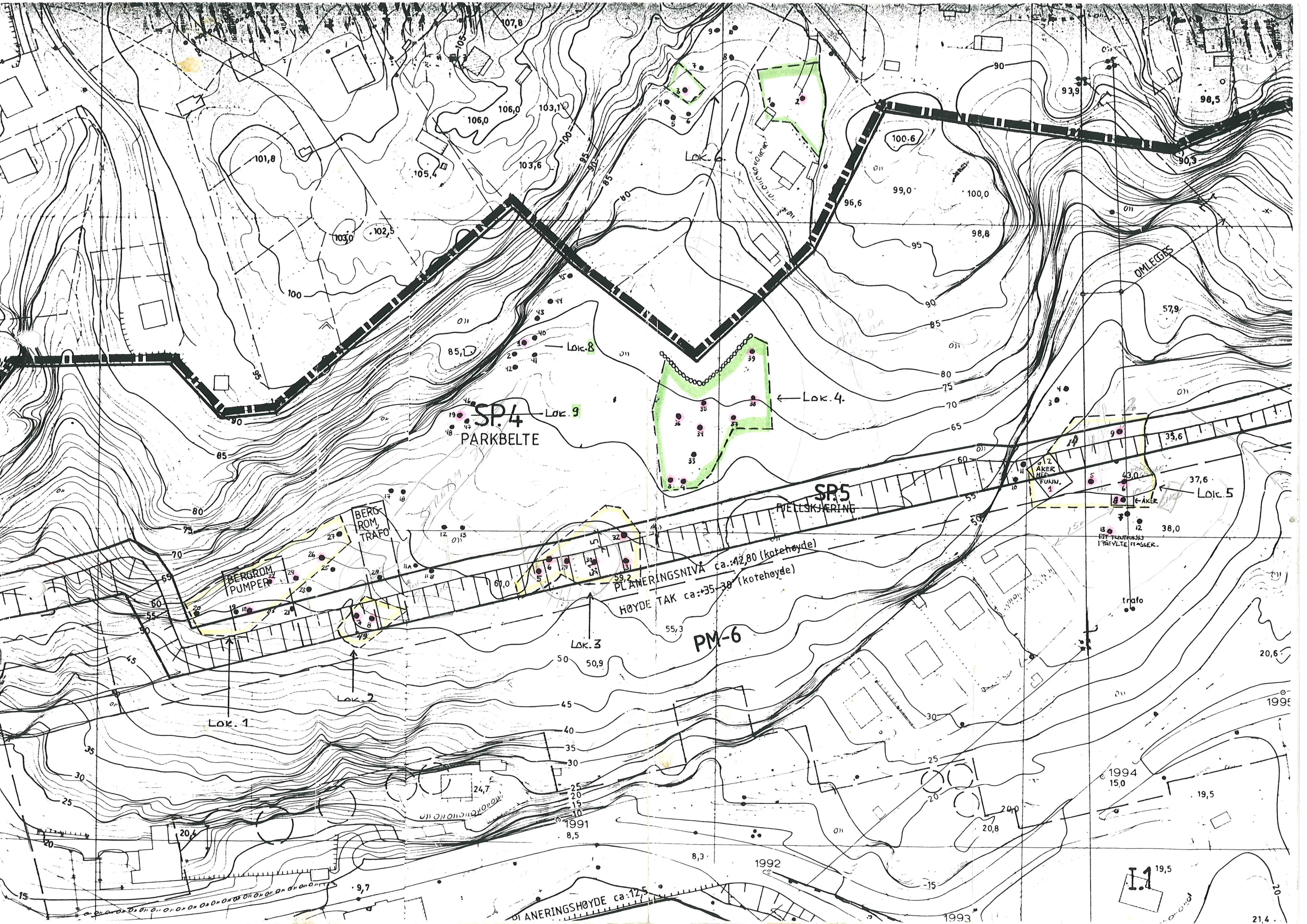
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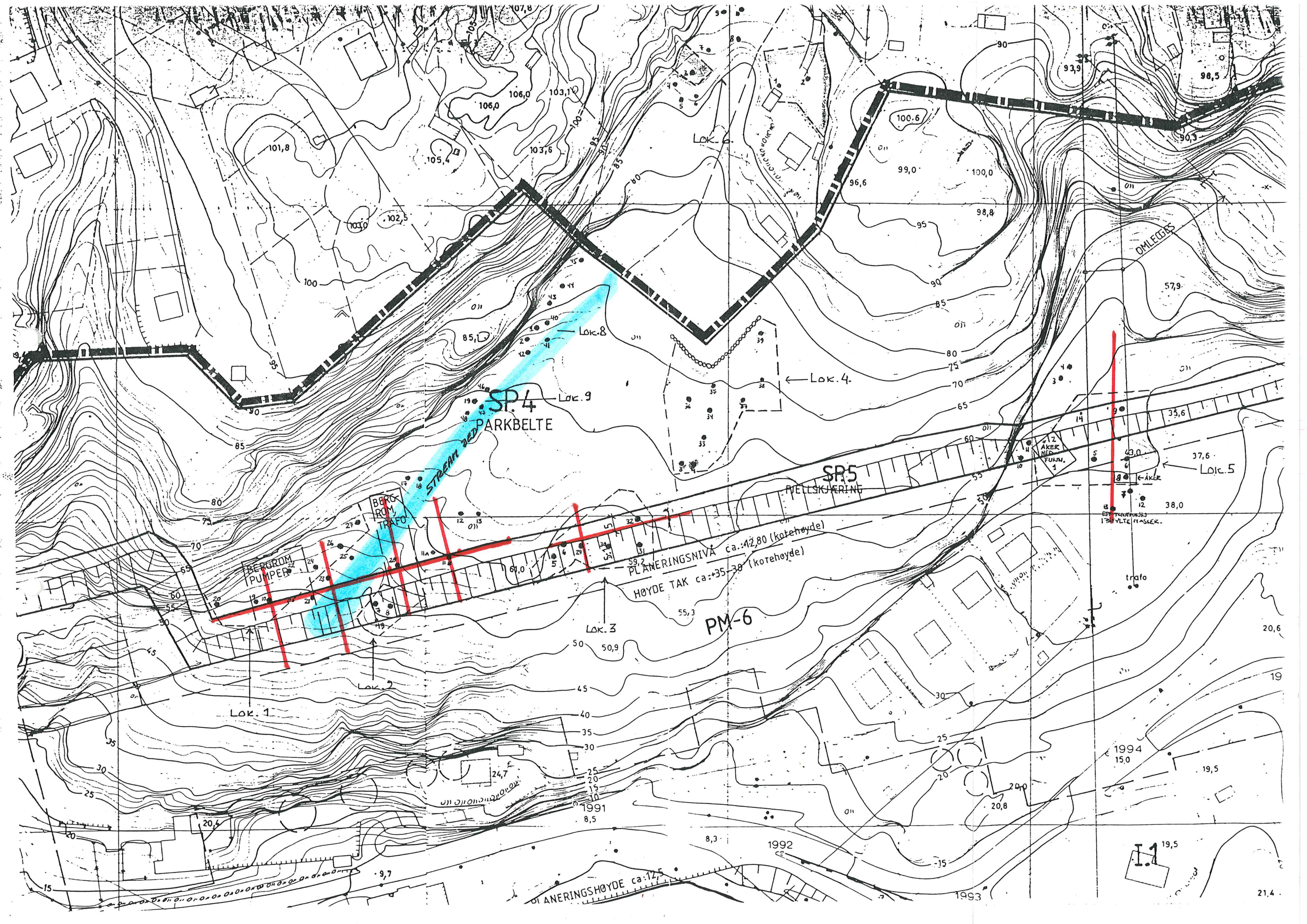
22 June, 1989

Sheila Coulson

Sheila Dawn Coulson

Note: The present author is solely responsible for the content and opinions on all of the information contained in this report. The evaluation of the materials and deposits from these sites which were determined by the accompanying archaeologist, Birgitte Skar, can be obtained on request.





SP.4
PARKBELTE

SP.5
TJELLSKJERING

PM-6

BERGROM
PUMPER

BERGROM
TRAFØ

PLANERINGSNIVÅ ca.: 42,80 (kotehøyde)
HØYDE TAK ca.: 35-38 (kotehøyde)

1.1

21.4



PM 6 AREA - HALDEN - LOCALITIES 1 to 2.
FACING EAST
STREAM BED BETWEEN SITES
20.06.89
SDC



PM 6 AREA - HALDEN - SLOPE OF LOCALITY 2.
FACING NORTH.

20.06.89
SDC.



PM 6 AREA - HALDEN - S. OF LOCALITY 2
FACING EAST
AREA OF STEEP SLOPE - CONTINUATION
OF LOCALITY

20.06.89 SDC.



PR 6 AREA - HALDEN - LOCALITY 3
 BAY AREA AT
 FRONT OF SITE.

FACING SOUTH

20.06.89
 SDC.



PR 6 AREA - HALDEN - LOCALITY 3
 FACING SOUTH

TEST PITS 6 + 5[↑] IN FOREGROUND.
 20.06.89 BIRGITTE SKAR IN BAY AREA
 SDC



PR 6 AREA - HALDEN - LOCALITY 3.

- FACING SOUTH
 TEST PITS 6 + 5[↑] IN FORE-
 20.06.89 GROUND
 SDC BIRGITTE SKAR IN BAY AREA.



'HOYTORT' - HALDEN - LOCALITY 5
FACING N
FROM DRIVE WAY TO GARAGE

20.06.89
SDC



'HOYTORT' - HALDEN - LOCALITY 5
FACING NW.

20.06.89
SDC



'HOYTORT' - HALDEN - LOCALITY 5
FACING NW.

20.06.89
SDC



'HOYTORT' - HALDEN - LOCALITY 5
FACING NORTHWEST

20.06.89
SDC



HOYTOMT - HALDEN - LOCALITY 5 - NOTE PATH
20.06.89 SDC FACING NORTH



HOYTOMT - HALDEN - LOCALITY 5
FACING NORTHEAST

20.06.89
SDC



HOYTOMT - HALDEN - LOCALITY 5
20.06.89 SDC FACING NW



*HALDEN - LOCALITY 6 - NEAR TEST PIT 1
FACING SOUTH*

*20.06.89
SDC*