

## Housepit 7 Wall and Rim Excavations

Robert J. Muir

### **Introduction**

During the 1987 and 1988 field seasons, excavations of the rim and walls of Housepit 7 (HP 7) were undertaken. The objectives of these excavations were to develop an understanding of:

1. housepit rim formation processes;
2. housepit roof construction;
3. roof deposit development; and
4. the occupational and construction history of HP 7.

This chapter presents a summary of excavations undertaken of the east wall and rim, conducted in 1988, as well as a series of trench excavations through the northern and southern portions of the house rim, undertaken in 1987.

This report was prepared prior to detailed analyses of artifacts recovered during excavation. Detailed information regarding lithic, faunal, and botanical remains can be found elsewhere (Vol. I, Chaps. 3, 9, 10, 14, and 16).

### **The East Wall Excavations**

In order to better understand the processes involved in rim formation and the deposition of roof collapse material, we considered it essential to excavate several full sequences of rim deposits as well as to extensively excavate portions of the walls where major roof beams abutted house rims. Thus extensive excavations of the east rim of HP 7 were conducted during the 1988 season and test trenches were placed in the north, south, and west

rims. The east rim of HP 7 was chosen for extensive excavation because it is situated at the base of a large hill in such a way that the hill slope naturally forms the bulk of the housepit rim. Whereas architectural features such as pits and postholes are exceedingly difficult to identify in ordinary rim deposits, such features in the east rim of HP 7 would have to be dug into the naturally yellow till which forms the hill slope and could be more easily identified through excavation.

Nine 2 m x 2 m units were excavated in 1988 (**Figs. 1, 2, and 3**). These included the remainder of Squares S and T which had been partially excavated in 1987 (Ssq.'s 1–4) as an east-west test trench and Squares CC through II. Only the western half of Square EE was excavated as the eastern half was on the periphery of the rim and presumably contained only a very minimal amount of cultural material.

Each square was excavated in 50 cm x 50 cm subsquares with the exception of Square S which was excavated primarily as a single unit. Whenever possible, excavation proceeded by stratigraphic layers. When a single stratum exceeded 10 cm in thickness, arbitrary 10 cm levels were employed within the stratum. All excavated material was screened through 1/4 inch mesh and all lithic debitage, bone, and prehistoric organic material was collected and bagged by stratum and level for each subsquare. Fire-cracked rocks larger than 3 cm in any dimension were counted and recorded by stratum and level for each subsquare.

Excavation proceeded until all cultural strata had apparently been removed and the sterile substrate completely exposed. However, an exploratory test column, excavated in Square HH, Subsquares 1 at the very end of the 1988 field season, revealed that the till-like substrate was not

completely devoid of cultural material in all areas. A single large scraper, presumably "early," (possibly of Shuswap or middle prehistoric age) was discovered at ca. 75 cm within the presumed sterile substrate. Given the occurrence of occasional flakes and charcoal and the loose, silty nature of these deposits, this may represent the accumulation of colluvium or an early pit depression. No similarly loose, artifact-bearing substrate was observed elsewhere in the excavation.

### **The Strata**

Four major strata were recognized during the excavation of the east rim of HP 7. Three of these had already been identified elsewhere in the house during previous field seasons, and in these cases strata designations which had previously been assigned were used. These include Stratum I (surface), Stratum V (roof), and Stratum XV (sterile). The fourth stratum (Stratum XXV) was newly identified during the 1988 excavations.

#### **Stratum I (Ia, Ib, and Ic)—Surface**

The designation Stratum I was given to all those deposits which seemed to represent sedimentary processes which occurred after the destruction of HP 7 or were so extensively disturbed by modern human activities that the original context of the deposit could not be accurately interpreted. Three distinct strata of this type were identified.

#### **Stratum Ia**

The designation Stratum I had been used in previous seasons to represent those deposits which made up the modern surface. The stratum consisted of littermat material including any vegetation, roots, loose humic surface soil,

etc., of which the surface was composed. This same definition was used in 1988. In general, the stratum can be defined as follows: very dark brown (10 YR 2/2) sandy silt containing many subangular gravels, particularly pea gravels. Pebbles, cobbles, and boulders are, for the most part, absent. Charcoal and fire-cracked rock are also mostly absent, except where the surface has been disturbed to the point that roof and/or other substrata have been intermixed with surface deposits. The compactness of the stratum is highly variable, ranging from extremely compact in relatively flat areas of high traffic to loose, unconsolidated silt and sand in areas of high traffic which are on an extreme slope. The compactness of the stratum appears to be a function of modern disturbance or lack of disturbance. Fire-reddening is virtually absent from Stratum I. Mixing of strata is also evidently caused by the activities of cicadas. Although this disturbance is not always clearly visible when excavating surface deposits, disturbance of this type must have occurred and should be noted as a significant cause of stratigraphic mixing.

In addition to natural surface soil and littermat, deposits which had been extensively disturbed by people working on steeply sloping surfaces (primarily by the excavators during excavation of adjacent squares) were considered and recorded as surface, even if the deposit clearly included roof material.

### **Stratum Ib**

During excavation of a test trench through Square S (Ssq.'s 1–4) in 1987, a light brown gravelly till-like deposit was identified and designated Stratum Ib. This designation was used in 1988 to represent similar deposits elsewhere on the east rim of HP 7. The originally discovered lens of Stratum Ib was found to extend into the northeast portion of Square DD, although

surprisingly it did not extend further into Square S (see profile of 94 m east for details [**Figs. 2, and 3**]). The deposit is best described as brown (10 YR 5/3) sand with some silt, mixed with high quantities (30–50%) of angular and subangular gravels and pebbles. The stratum contains no fire-cracked rock, lithics, bone, or organics. It lies within a depression which is evident in profile. Stratum Ib is interpreted as colluvium which has been dislodged from its original location upslope. Whether this slope movement occurred as the result of human trampling upslope or simply as the result of natural processes, such as water flow or soil creepage, is uncertain. However, as the deposit seems to be completely devoid of cultural material, a natural cause seems probable.

Another deposit similar to that which was discovered and designated Ib was discovered (during profiling) in Squares CC and EE. The stratum is described as follows: very dark grayish brown (10 YR 3/2) silty loam (30–50% silt, 10–30% sand, and 10–30% gravel) containing many angular and subangular gravels and some larger clasts (0–10% pebbles). A few lithics and occasionally charcoal and mammal bone were included in the deposit. The deposit seems to represent colluvium that washed down on roof collapse material and was contaminated with miscellaneous cultural debris. The deposit occurs in lenses and pockets and varies in cultural content. Again, the deposit may be the result of prehistoric use of the slopes immediately adjacent to the housepit for trails, or possibly from digging out material from the slope for roof covering or other uses, although a completely natural origin is also possible.

In all cases Stratum Ib underlies both Stratum Ia and Stratum Ic. It should also be noted that in most cases, artifacts recovered from Stratum Ib

were simply given the provenience Stratum I (surface), as the stratum was not clearly identified during excavation.

### **Stratum Ic**

In some places, natural accumulation of aeolian silt was quite extensive and a thick layer of fine, apparently natural loam lay on top of the cultural deposits. This was particularly true in the peripheral areas including the northeast corner of Square CC and the southeast corner of Square DD. This deposit was compared to natural aeolian silt deposits elsewhere at the site and found to be identical. The deposit is described as a very dark brown (10 YR 2/2) extremely silty (70–100%) loam with few gravels or larger clasts. Organic staining is virtually absent, as is fire-reddening. Lithics are extremely rare and charcoal is only occasionally present. The deposit is interpreted as a natural aeolian silt which is slightly contaminated with cultural materials from around the house. This stratum clearly lay between Stratum Ia and Ib. Again, the stratum was not clearly recognized during excavation and artifacts found within it are simply labeled Stratum I (surface).

### **Stratum V—Roof**

The designation Stratum V originated in 1986 and was used throughout the 1987 season to represent Kamloops horizon roof collapse deposits. This practice was continued in 1988. Because the units excavated in 1988 were on an extreme slope and were also located on the house rim, the roof deposits excavated in 1988 were not always typical of roof deposits found previously within the house. The extreme slope of the rim prevented roof deposits from remaining in some locations, particularly in the central rows of subsquares in Squares T, FF, GG, and HH and roof deposits in peripheral areas (above the

inferred roof-line) were not always easily distinguished from surrounding strata. In general roof deposits are described as follows: black (10 YR 2/1) silty (50–70%) sandy (10–30%) loam with subangular gravels (10–30%) and pebbles (0–10%). The stratum tends to be fairly compact and exhibits extreme organic staining. Charcoal is very common, frequently consisting of large fragments (10–15 cm) which seem to represent burnt roof timbers that fell against the wall. Fire cracked rock is present in some locations particularly on the eastern (upslope) portion of the rim where the angle of incline is least severe and roof deposits are relatively thick. As discussed in detail below, a surprisingly large quantity of bone was recovered from the roof deposits, including fish and mammal remains. Lithics are common in most roof deposits, and in one instance, over 200 flakes were recovered from one 5 cm level in one 50 cm by 50 cm subsquare (i.e., Sq. T, Ssq. 9). This concentration may represent debris which resulted from a tool making episode which occurred on the roof, or simply a dump of material collected from elsewhere in or around the house.

Although the deposit clearly consisted of roof collapse material, the designation of rim spoil was used as a descriptor for those deposits which were located on top of the rim. These should not be confused with actual rim deposits (Stratum XIII), as the designation is simply intended to indicate the location of the Stratum V deposits.

Within the house, roof deposits were clearly indicated by relatively complete (although burnt and fragile) roof timbers oriented at right angles to the rim. Some of these timbers extended into adjacent squares within the house. In at least one case, smaller 'cross beams' were found lying on top of the larger timbers.

## **Stratum XXV**

Between the roof deposits and the natural sterile substrate (XV) exists a layer of till-like silty sandy loam which is fairly rich in cultural material. As such a layer had not been clearly identified previously, the stratum was arbitrarily designated Stratum XXV. The stratum consists of dark brown (10 YR 3/3) gravelly, sandy silt containing some gravel (10–30%) and occasionally pebbles (0–10%). It tends to be about as compact as typical roof deposit. Bioturbation is present, making clear identification of stratigraphic interfaces more difficult. Most of the bioturbation seems to be due to cicada activity. Charcoal flecks are present although they rarely exceed about 1 cm<sup>3</sup> in size. Large pieces of wood and charcoal are absent. The stratum is interpreted as being churned up till mixed with cultural material. Contextual evidence, such as large and small flakes laying flat on top of the stratum as well as several large cobbles and small boulders also laying exactly on the surface of the deposit, suggest that the stratum represents an interior surface accumulation which formed prior to the destruction of the pithouse. The stratum was probably produced during the most recent construction and occupation of the house.

Stratum XXV is restricted to the upper slopes of the rim. It does not occur on the extremely steep portions of the wall nor does it occur at the base of the rim.

Some of the squares excavated in 1988 protruded into the pithouse living area. In these cases (Sq. T west side, Sq. HH west side, and Sq. II southwest corner), a number of other strata were encountered. These will be briefly reviewed here.

### **Stratum II—Kamloops Horizon House Floor**

In most cases, floor deposits were not well defined in the 1988 excavation units. Those deposits which were resting directly on sterile till inside the house or were found within 3 cm of complete roof timbers within the house were designated as Stratum II. This stratum tended to be relatively rich in artifacts.

### **Stratum XVIII - Post-Collapse Rim Slump**

This stratum consists of redeposited materials which have accumulated at the base of the rim inside the house due to natural surface erosion and slope wash. The stratum is characterized by a well sorted sandy silt deposit, usually brown (10 YR 5/3) in color. Charcoal is almost completely absent as are organics. Lithics and bone are present but generally rare. Fire-cracked rock is also rare. The stratum forms a thick wedge just beneath the contemporary surface, laying on top of burned beams and undisturbed roof collapse material.

### **Stratum XIX - Occupation Rim Slump**

Between Stratum V (roof) and Stratum II (floor) a layer of extremely compact, fire-reddened silty loam was found at the edge of the floor during excavation. The stratum seems to represent a thick accumulation of floor deposits or material dumped against the wall, intermixed with natural till sediments which have been dislodged from the wall of the house and naturally accumulated at the base of the rim.

## **The Features**

Five pit features, six postholes, and a series of small shallow depressions were discovered during the 1988 excavations. Most of these seem to be related to the roof structure of the house.

### **P88-1**

Located within Subsquares 6 and 7 of Square S, this feature consists of a fairly large (25 cm diameter) vertical posthole dug into sterile till deposits. The hole is approximately 50 cm deep and was filled with a dark brown gravelly silty loam containing large and small fragments of charcoal.

This feature may represent the placement of a major roof beam, however, its vertical orientation makes this interpretation somewhat dubious. Another possibility is that the feature is related to special architectural problems associated with construction of a pithouse on the side of a hill (e.g., a structure to prevent snow and/or slope washed gravels, cobbles, and boulders from accumulating on the roof of the house).

### **P88-2**

Located primarily in Squares CC and FF, this feature consists of an unusually large (210 x 30 cm) basin-shaped shallow pit. The pit was filled with two distinct fill units: the uppermost deposit being extremely roof-like, containing large amounts of charcoal, and: the lower deposit consisting of a very silty and soft light brown deposit containing flecks of charcoal and large amounts of fish bone. It was noted by the excavator, that most of the cultural material in the second fill unit was recovered from its surface, "where bones, flakes, and charcoal accumulated."

This feature is interpreted as a construction platform which was used during the most recent construction of the housepit. It is also possible that the feature acted as a roof beam foundation during earlier house construction episodes.

A single late Plateau/early Kamloops point was recovered from the feature fill. Like most of the artifacts recovered from rim and roof strata, it should not be considered an accurate temporal indicator as it is likely to have been removed from its original context and redeposited.

**P88-3**

Located in the center of Square CC, this feature consists of a large (100 cm x 100 cm) basin-shaped pit containing several small boulders and large cobbles as well as pebble and cobble packing. The pit was filled with roof-like materials including charcoal, flakes, deer bone, fish bone, and birch bark. A scapula of a deer-size ungulate was recovered from the bottom of the pit. The feature seems to represent a roof beam foundation with the rocks acting to secure and support the beam.

**P88-4**

Located in the northeast corner of Square DD (Ssq.'s 5, 6, 9, 10, 13, and 14), this feature consists of a large (140 cm x 80 cm) basin-shaped pit containing three large cobbles. The pit was filled with an extremely dark colored (10 YR 2/1) deposit which strongly resembled roof material. A large strip of folded birch bark and a relatively complete, medium-sized left ungulate scapula were among the fill deposit. Again, this feature seems to represent a roof beam foundation, probably used during the most recent construction of the house.

**P88-5**

Located in the western portion of Square DD and the eastern portion of Square HH, the feature consists of a very large (150 cm • 100 cm) basin-shaped pit or possibly consists of several smaller pits which give the impression of a single large depression. One fill unit was clearly identified while several others were made difficult to identify and interpret due to encroachment of rim deposits into Square HH. The majority of the fill consisted of a dark brown humic deposit with some pebbles and a few cobbles. Charcoal was quite common with some fragments being greater than 120 cm<sup>3</sup>. Lithics, bone, and organics were also present although not as frequent as in roof collapse deposits. A small posthole, surrounded on three sides by large cobbles was found within the southern portion of the feature. The feature may have been a beam emplacement used during an 'early' house construction episode.

Six postholes were clearly identified including one on the house floor (Sq. II, Ssq. 8). While this and the other posthole in Square II are clearly related to the roof structure of the house the function of the remaining holes is uncertain.

Eight small shallow depressions were found along the steepest portion of the east rim of the house. Each of these depressions was approximately the same size (10 x 5 cm) and had a characteristic 'half moon' shape. It was suggested that these depressions may represent toe holds used by the inhabitants to access storage space immediately below the roof at the top of the rim.

### **The Lithics**

The 1988 excavations of HP 7 yielded an abundance of lithic debitage. In general the overall frequency of material recovered is comparable to that of roof and roof-like upper rim excavations from previous years. Some of the major trends and exceptional occurrences noted during excavation will be discussed.

In general, lithic debitage was found to occur within Stratum V (roof deposit) more frequently (10–30 flakes/12.5 liters) than in any other stratum, although the surface of Stratum XXV was also noted to occasionally yield equally high frequencies of flakes. Trachydacite flakes and flake fragments were by far the most common specimens however, a wide range of other materials were also present, including cherts, chalcedonies, quartzite, and several small flakes of obsidian.

Two concentrations of flakes are particularly noteworthy: the northeast corner of Square T (Ssq.'s 9 and 13) yielded an unusually high concentration of lithics. Over 300 flakes were found within a 30 cm<sup>2</sup>, in little more than 10 cm of Stratum V (a typical 12.5 liter sample yielding over 50 flakes). Included among the debitage was a Kamloops horizon point preform. The concentration is highly suggestive of the possibility that this portion of the roof was used at least once as an outside lithic workshop area. Another possible explanation for the concentration is that it is the result of a dump of debitage which was created elsewhere, (perhaps within the house) gathered up, and discarded on the roof.

A trachydacite core and concentration of large flakes were found in association with Feature 88-3 (Sq. CC, Ssq.'s 2, 3, and 6). The flakes were found beside, under, and on top of one of the larger rocks found within the

feature, and the core was found on top of the rock. Assuming that the flakes and the core are all the products of a single tool making event, it is difficult to explain how they could naturally arrive at the arrangement in which they were found after the roof was in place. Instead it seems that their deposition occurred at approximately the same time as the deposition of the rock with which they are associated, or that they were intentionally deposited. In either case it is clear that the rock has moved little since the deposition of the flakes.

### **Diagnostics**

As was the case in previous seasons, diagnostic artifacts from a number of cultural horizons were excavated and identified during the 1988 season. A list of these is included here (Table 1). Kamloops horizon side-notched projectile points and preforms are by far the most abundant. It should also be noted that Kamloops horizon diagnostics were the only diagnostic artifacts found within floor deposits (Stratum II) of the house in 1988.

Late Plateau/early Kamloops material was also fairly abundant and was found within Strata V, XVIII, and XXV, where Kamloops horizon points also occurred. Only two definite Plateau horizon diagnostics were recovered from the excavations; these were both found within the roof material (Stratum V).

Earlier materials include two Shuswap horizon points and a microblade core, all found in Stratum V. These may be the result of disturbed material from a Shuswap horizon occupation of the housepit or simply artifacts which were redeposited during construction (excavation) of the house floor.

**Table 1: Diagnostic artifacts—1988 excavations of HP 7**

Square	Subsquare	Stratum	Level	Description
CC	15	V	1	Plateau point
CC	15	V	1	Plateau preform
CC	6	V	2	Kamloops point
CC	11	V	2	Late Plateau/early Kamloops
CC	P88-2			Late Plateau/early Kamloops
EE	12	V	1	Kamloops tip ?
EE	4	XXV	1	Biface tip
S	5	V	1	Late Shuswap point
S	7	V	1	Late Plateau/early Kamloops
S	7	V	1	Kamloops preform
S	9	XXV	1	Late Plateau/early Kamloops
DD	16	V	1	Late Plateau/early Kamloops
DD	15	V	2	Late Plateau/early Kamloops
DD	16	V	1	Microblade core
T	11	I	1	Kamloops preform
T	13	V	1	Kamloops preform
T	16	I	3	Kamloops point
T	16	I	3	Kamloops tip ?
T	8	V	5	Kamloops point
T	16	V	1	Kamloops point
T	16	XIX	3	Kamloops preform
II	6	I	1	Kamloops preform
II	10	XXV	1	Kamloops point
II	8	XVIII	3	Late Plateau/early Kamloops
II	4	V	1	Shuswap point base
II	8	II	1	Kamloops point
II	4	V	2	Kamloops point

### The Faunal Remains

The overall analysis of faunal remains is presented in Volume I, Chapter 10, and Volume II, Chapter 7, however some remarks on the general distribution of bones as noted during excavation of the rim will be made here.

Faunal remains were more abundant than expected. The frequency of the remains from rim and roof deposits, particularly those of medium-size ungulates, far exceeded that of previous years. This is especially apparent when one compares the amount of bone recovered from the rim in previous years to the amount recovered in 1988.

Deer-size ungulate and fish (presumably salmon) remains made up the majority of the faunal assemblage. Fish remains seemed to come primarily from pit fill deposits and roof collapse material. In one instance, articulated fish remains were found *in situ* (Sq. DD, Ssq. 8).

The deer-size ungulate remains included antler, scapulae, long bone fragments, metapodials, carpals, tarsals, phalanges, and teeth. Of particular interest is the abundance of relatively complete scapulae which were recovered (four in total), three of which were found in association with pit features (P88-3, P88-4, and P88-5). In each case, a scapula was found within the fill of the northern portion of a feature. It seems unlikely that these occurrences are purely coincidental. Assuming that cultural activities are responsible for the distribution, we can formulate a number of causal scenarios. One possibility is that the scapulae are waste remains of food eaten during the construction of the pithouse. Another is that the scapulae were used as scoops for removing loosened materials from excavated pits and depressions. Finally, they could represent ceremonial offerings which were made at the time of the house raising.

A variety of other faunal remains were found scattered throughout the excavated area. These include bivalve shell fragments, bird bone, beaver teeth, and possibly canid remains. Shell and beaver tooth fragments seemed unusually concentrated in features and in upslope portions of the wall, near the junction with the roof.

### **Unusual Artifacts**

During the 1988 excavations, a number of artifacts which were unusual in form, function, and/or character were recovered from HP 7. The most

notable of these is a stone zoomorphic pendant recovered from floor deposits near the house wall in Square T, Subsquare 12 (Vol. II, Chap. 13, **Fig. 8**). The pendant displays turtle-like (possibly stylized rattle snake) head morphology including eyes and a smiling mouth. The material of which the pendant is made appears to be serpentine.

A very small shell bead was recovered from the roof deposits of Square DD, Subsquare 14. The bead may be composed of dentalium shell, however this identification is far from positive.

Worked bone object fragments, including portions of bone needles, were unusually common in some Squares, particularly S, CC, and DD.

Finally, a fragment of a steatite pipe was recovered from the roof deposits of Square II, Subsquare 4. The artifact appears to be a pipe bowl fragment and is engraved with a repeating chevron pattern.

### **Conclusions About Walls and Roofs**

As stated earlier, one of the primary goals of the 1988 excavations of HP 7 was to improve our understanding of housepit roof construction. The 1988 excavations have successfully identified a number of pit and rock features which seem to be roof beam emplacements. These features are located in the uppermost third of the rim with the (apparently) most recent foundations being at the very top. The height of the features suggest that the roof structure may have been gabled (rather than conical) on the side of the house closest to the hillside. This may have facilitated water runoff and prevented accumulation of colluvium at the abutment of the roof and hillside. Future excavations might include excavation of one or more other

houses which are similarly situated on hill slopes (e.g., HP 1), as it would be interesting to compare the results.

### **Rim Test Trenches**

The primary goal of the test trench excavations was to provide data which would allow for a better understanding of housepit rim formation. The understanding of such processes was required to establish the relationships between rim and roof deposits as well as to discover how housepits changed through time.

Exploratory trenches in HP's 1, 5, and 7, excavated in 1986, were extended and expanded. The most extensive excavations were of the rim of HP 7. It is these excavations on which this report is based (Figures 7-9). Excavation was conducted according to individual stratigraphic layers, 10 cm. arbitrary divisions were used when a stratum exceeded 10 cm. in thickness or was not clearly defined. In most cases, individual layers were identified without great difficulty however, rodent disturbance confused this process in some areas.

Analyses of lithics, organic material, soil samples, and carbon samples have been reported in Volumes I and II. A number of additional observations concerning the nature of housepit rim deposits can be made.

### **General Description**

Three basic types of rim deposits were identified:

1. hydrophobic roof-like deposits containing some organics;
2. extremely organic midden deposits; and
3. redeposited glacial till.

### **Hydrophobic Roof-like Deposits**

The roof-like deposits are located in the uppermost levels of the rim. These layers seem to represent roof material which was pulled down onto the rim prior to destruction of the pithouse or material that once lay as a continuous sheet of deposit covering the pithouse structure. The hydrophobic nature of the deposit has allowed excellent preservation of birch bark and other organics. However, the concentration of organic material is not as great as in the organic midden deposits below. Charcoal, gravel, and angular cobbles are also common to these upper levels. These may represent both hearth material, discarded during occupation of the house, and burned roof timbers displaced during various re-excavations.

Few faunal remains were recovered from these deposits. Concentrations of bone occur infrequently, usually consisting of several fragments of a single element. Horn and antler appear to be completely absent from these layers.

Lithic debitage is extremely abundant in these roof-like deposits suggesting that the rims were common areas for the production of stone tools. Shuswap, Plateau, and Kamloops horizons were all represented by diagnostic projectile points recovered from these deposits.

### **Organic Midden Deposits**

Below the upper layers lie extremely organic midden deposits alternating with layers of redeposited glacial till.

The organic layers are primarily made up of birch bark, fir needles, small fragments of wood and charcoal, and a great deal of unidentified fibrous plant material. Ten such layers were discovered and varied between one and ten centimeters in thickness. Each layer appears to be made up of many

individual lenses, often identified as a concentration of a particular organic material. This would seem to indicate that the layers were created through multiple depositional (or dumping) events, possibly representing cleaning episodes which would occur in late fall prior to reoccupation of the house.

As in the above layers, gravels and small angular cobbles are common to these deposits, possibly representing discarded hearth material.

Faunal material is largely absent. This may be due to the scavenging activity of rodents, lagomorphs, canids, and sciurids which would remove discarded faunal materials from around the house between winter occupations.

Lithic material is very common. However, only the uppermost organic layers contained projectile points of any kind and these were found to be of uncertain type (possibly late Plateau).

### **Redeposited Glacial Till**

Layers of redeposited till are found between the organic deposits. These layers consist of compact silts, sands, and gravels. They contain no organic material and are therefore easily distinguished from their surrounding strata. Faunal material is also completely absent. Lithic material includes several Plateau horizon projectile points as well as some less diagnostic points similar to those found within the organic layers (late Plateau?). Lithic debitage is found but is not as abundant as in other types of rim deposits.

In addition to these three basic types of deposits is a fourth type found only on the northern side of the pithouse. The deposit clearly underlies all other strata in the rim. It consists of lenses of redeposited sterile glacial till of varying thicknesses (up to 50 cm) intermingled with lenses of till-like silts,

sands, and gravels thoroughly mixed with gravelly sandy loam and cultural material. Large and small cobbles are relatively common to this deposit while organics are quite rare. Lithic material is not abundant and only one projectile point was recovered.

### **Changes Through Time**

As excavation of the housepit progressed, it grew increasingly evident that the rim deposits contained a great deal of information about the formation and development of the house through time. Dramatic changes in types of deposits as well as in depositional patterns were clearly illustrated in the rims. Many of these are still not understood, but those that are include deposits which indicate initial excavation and later re-excavation of the housepit floor, and stratigraphic patterns including expansion of the house.

The fourth type of deposit described above supplies evidence for the earliest events in the life of the housepit. This stratum obviously represents the earliest rim deposits and the abundance of till may represent material displaced during the initial excavation of the pithouse. The fact that these deposits do not appear in the southern rim suggests that the pithouse has expanded to the south at least once since this initial construction. An expansion of two or three meters to the south would completely remove any initial southern rim deposits. Excavation of the western portion of the rim would allow verification of this possibility and may also provide evidence regarding the extent of this expansion.

Evidence for later expansion of the house is found in the multiple till layers above these earlier deposits. These layers of till are likely derived from renewed excavation of the housepit floor into the underlying sterile till.

However, these lenses occur infrequently enough so that it seems unlikely that they represent each rebuilding and recleaning of the housepit. When roofs required replacing it appears likely that the early residents either left the floor deposits in place, or simply removed the loose organic rich, black floor deposits without extending any further into the sterile till. What the till layers in the rim may then represent are major construction episodes during which the housepit was enlarged.

Even stronger evidence is available for the expansion of the house in more recent times. In the southern rim deposits, all but the uppermost layers are abruptly truncated along a vertical plane on the inside of the house. The truncated deposits would have included portions of many different strata, thereby mixing remains from different time periods. These mixed deposits were most likely thrown up on top of the rim, explaining the variability in diagnostic projectile points from the uppermost layers. The truncation of layers indicates that the innermost portion of the rim had been excavated prior to the final occupation of the house. This excavation into the rim would again expand the house southward. Unfortunately, rodent disturbance prevented the confirmation of such an event in the northern rim deposits.

Not as well understood are the changing patterns in rim deposits through time. This is particularly true of the change from alternating layers of till and organic remains to the more recent roof-like layers. The absence of roof-like deposits in the lower levels indicates some change in the construction of roofs through time. Roof supports may have been placed at the base or on the inside edge of the rim in these earlier times, thus earthen roof deposits would not flow onto the tops of the rims but would instead

slump against the inside edge. However, upon collapse and rebuilding of the house, these slumped deposits would have to be removed and would most likely have been placed on top of the rims. Thus, this explanation is far from satisfactory. Excavation of other housepit rims may aid in the understanding of this problem.

### **Roof Construction**

In seeking to understand how the later earthen roof deposits were related to the rim, as well as in an attempt to assess deposit transformations during collapse episodes, endeavors were made to discover where and how the roof supports were secured. These could have been set right on top of the rim, on the inside edge of the rim, or varying distances down from the inside edge. Unfortunately, no postholes or ledges where such supports would have lodged were clearly identified in the rim trenches. However, stratigraphic evidence, including the layer of roof-like deposits in the uppermost portion of the rim as well as indications of roof beam emplacements from the east wall excavations, indicate that the base of the roof supports may have been on a continuous plane with the top of the rim.

### **Rock Features**

During the 1987 season, two large rock features were discovered within the rim of HP 7. Both features were found in the northern portion of the rim and were located within the earliest deposits. Each consisted of large cobble and small boulder sized rocks. These rocks had been placed in piles and then surrounded and covered in sterile till material. The larger of the two piles was associated with several large fragments of wood.

The cause and/or purpose of these features is difficult to determine. One possibility is that they represent foundations for early roof supports. Patterned placement of more such features would lend support to such a theory. Another possibility is that the piles simply represent rocks removed from the housepit during its initial excavation. A satisfactory explanation will require further research.

### **Summary of Rims**

The 1987 season greatly increased our understanding of rim deposits. Being well stratified, they contain information regarding the construction and occupational history of the housepit. The rims of HP 7 were studied in considerable detail producing a scenario of rim formation against which other rims can be compared. Included in this scenario are multiple expansion and re-excavation episodes, represented by redeposited till and truncated strata; regular cleaning episodes, represented by organic rich midden deposits; and changes in roof construction, represented by changes in depositional patterns.

Further research is required before conclusions can be advanced about several aspects of rim formation and function. These include:

- (1) the possibility that rims acted as outside workshop areas for activities such as stone tool production;
- (2) confirmation of multiple expansions of the housepit throughout its occupation;
- (3) understanding of major pattern changes in rim strata (particularly the absence of roof-like deposits in earlier layers);
- (4) the relationship between roof supports and rim deposits, and;

(5) the function of large rock features found among the earliest deposits.

### **Figures**

Figure 1: Plan of the excavated area of the eastern wall of HP 7 showing square designations, cultural depressions, and rock accumulations.

Figure 2: East-west profiles of the east wall excavations of HP 7. Strata are identified with roman numerals.

Figure 3: North-south profiles of the east wall excavations of HP 7.

Figure 4: An overview of the east wall excavations of HP 7 looking northeast.

Figure 5: An overview of the east wall excavations of HP 7 looking east.

Figure 6: An overview of the east wall excavations of HP 7 looking southeast.

Figure 7: West wall profile of Squares M, N, O.

Figure 8: East wall profile of Squares M, N, O, Trench 2.

Figure 9: East wall profile of Squares D, K, L, Trench 2.

Figure 1. Plan of the excavated area of the eastern wall of HP 7 showing square designations, cultural depressions, and rock accumulations.

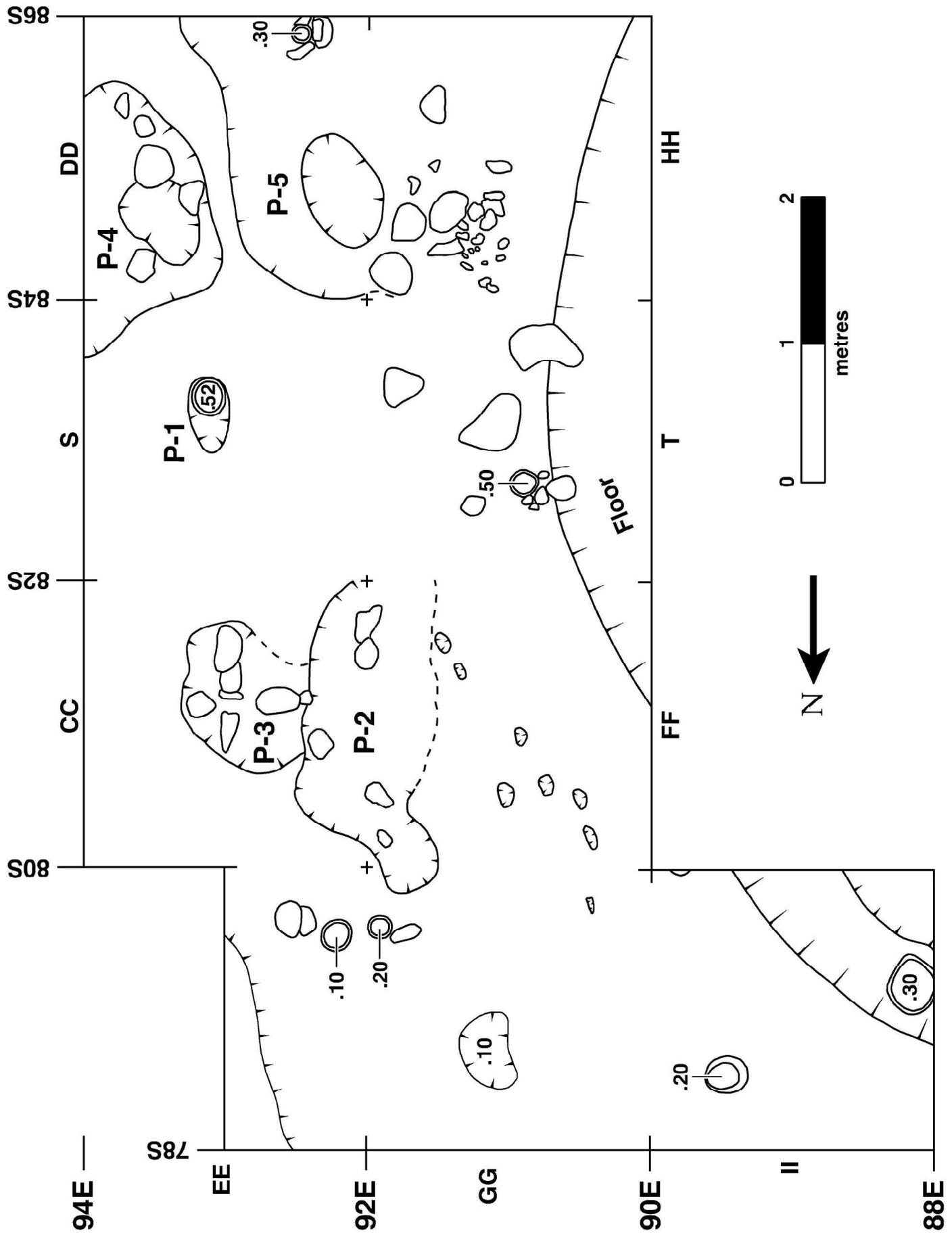




Figure 3. North-south profiles of the east wall excavations of HP 7.

Housepit 7, North-South Wall Profiles,

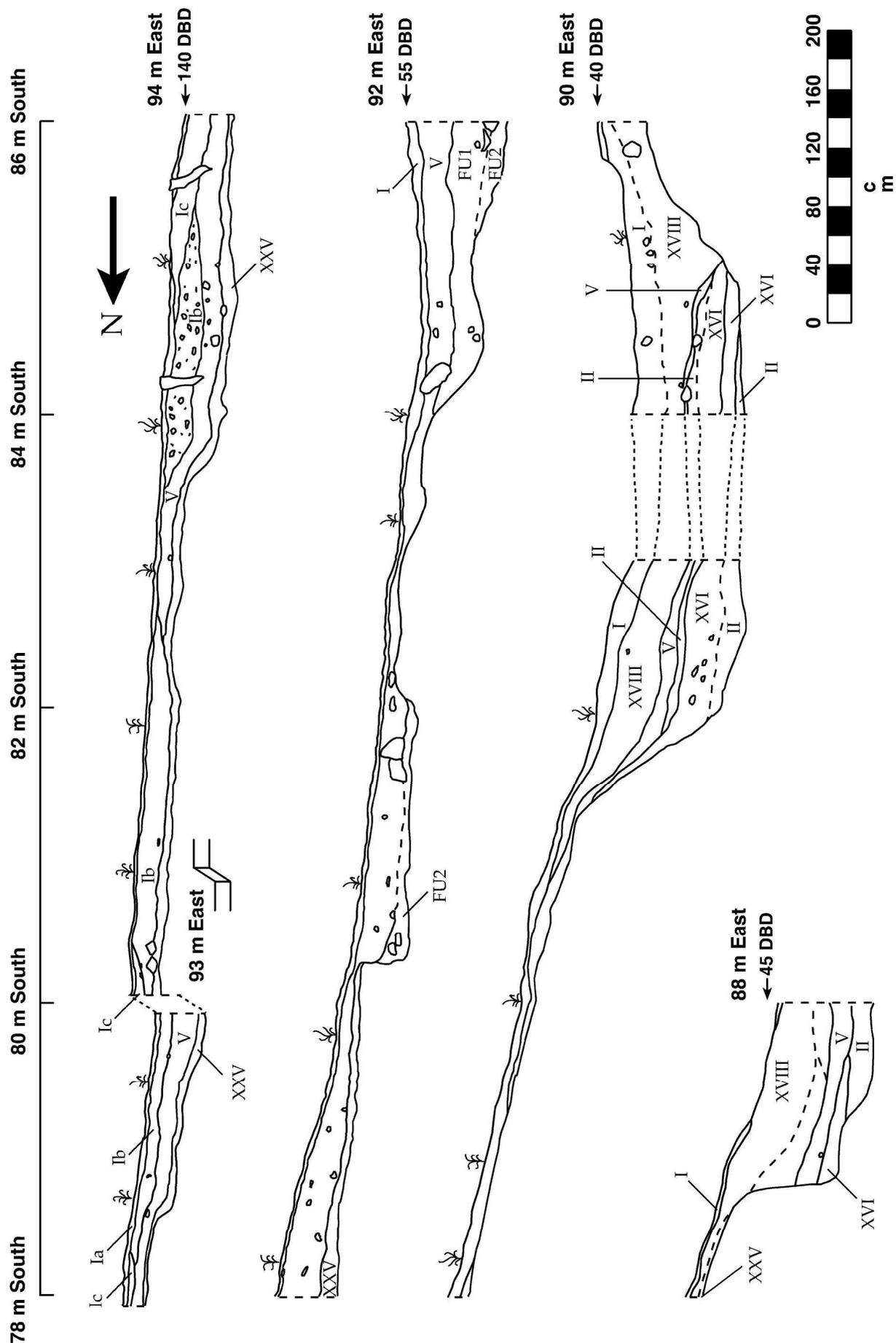


Figure 4. An overview of the east wall excavations of HP 7 looking northeast.



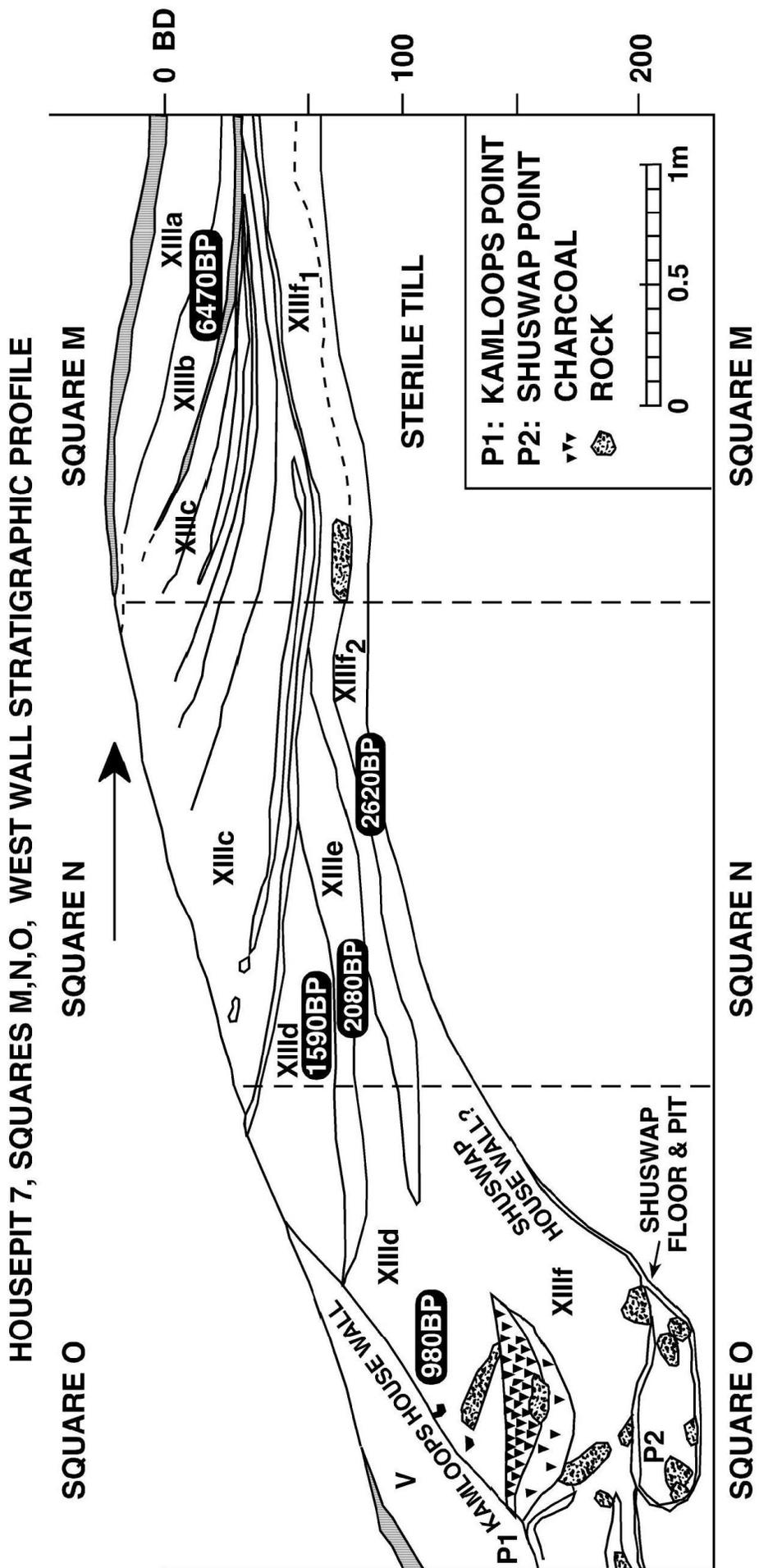
Figure 5. An overview of the east wall excavations of HP 7 looking east.



Figure 6. An overview of the east wall excavations of HP 7 looking southeast.



Figure 7. West wall profile of Squares M, N, O.



# Housepit 7, East Wall Profile Squares M, N, O, Trench 2

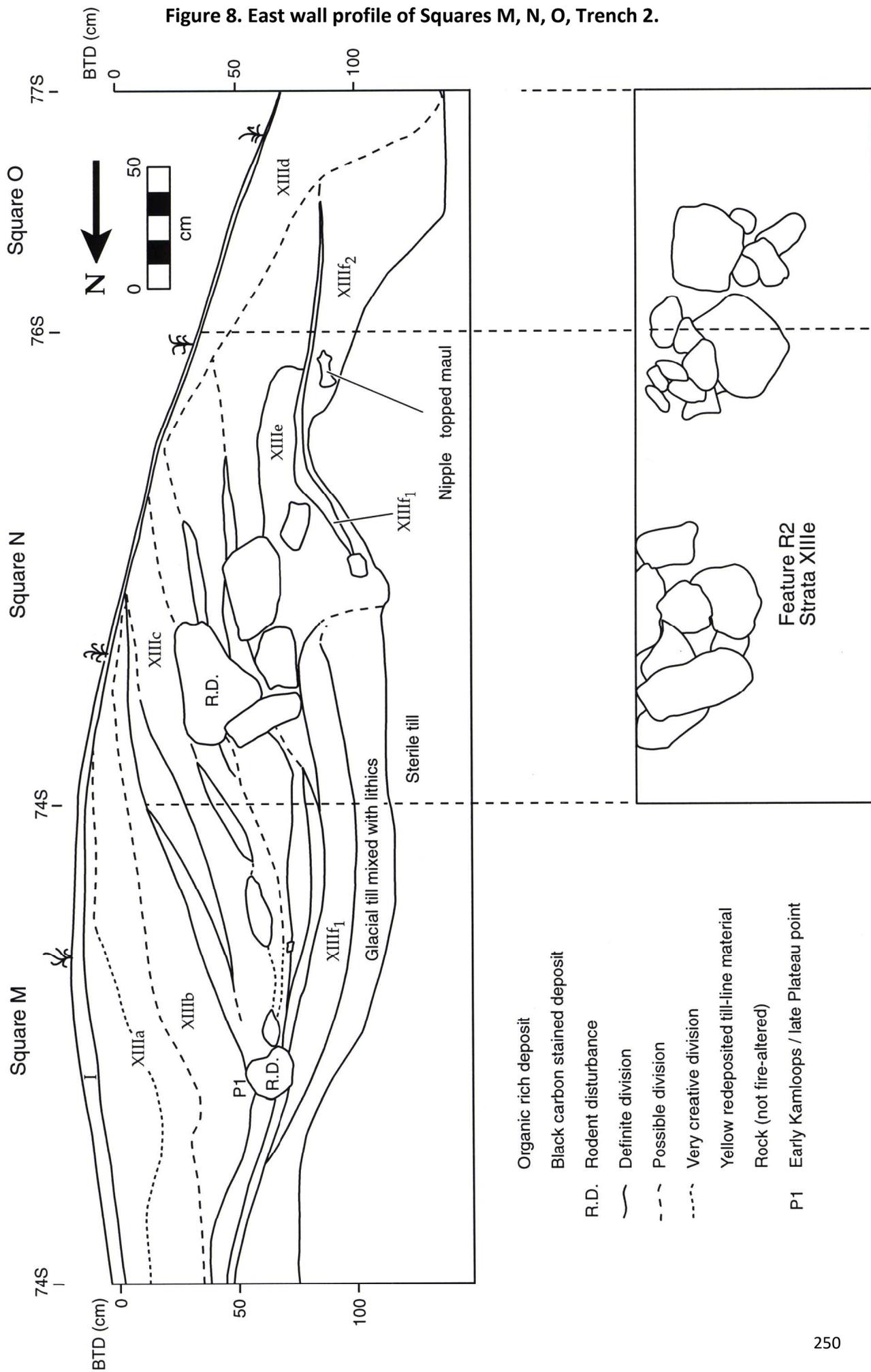
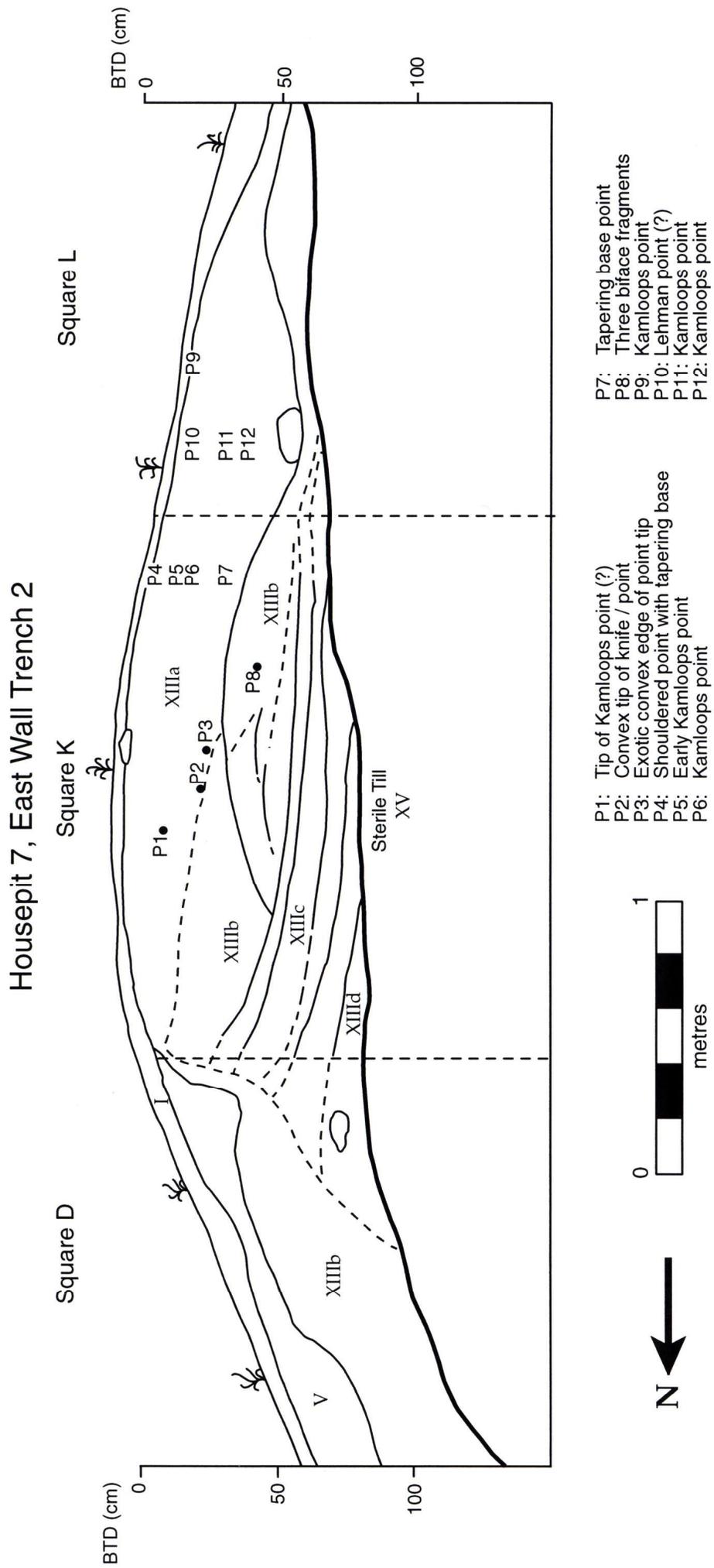


Figure 8. East wall profile of Squares M, N, O, Trench 2.

Figure 9. East wall profile of Squares D, K, L, Trench 2.



**Table 1: Diagnostic artifacts—1988 excavations of HP 7**

<b>Square</b>	<b>Subsquare</b>	<b>Stratum</b>	<b>Level</b>	<b>Description</b>
CC	15	V	1	Plateau point
CC	15	V	1	Plateau preform
CC	6	V	2	Kamloops point
CC	11	V	2	Late Plateau/early Kamloops
CC	P88-2			Late Plateau/early Kamloops
EE	12	V	1	Kamloops tip ?
EE	4	XXV	1	Biface tip
S	5	V	1	Late Shuswap point
S	7	V	1	Late Plateau/early Kamloops
S	7	V	1	Kamloops preform
S	9	XXV	1	Late Plateau/early Kamloops
DD	16	V	1	Late Plateau/early Kamloops
DD	15	V	2	Late Plateau/early Kamloops
DD	16	V	1	Microblade core
T	11	I	1	Kamloops preform
T	13	V	1	Kamloops preform
T	16	I	3	Kamloops point
T	16	I	3	Kamloops tip ?
T	8	V	5	Kamloops point
T	16	V	1	Kamloops point
T	16	XIX	3	Kamloops preform
II	6	I	1	Kamloops preform
II	10	XXV	1	Kamloops point
II	8	XVIII	3	Late Plateau/early Kamloops
II	4	V	1	Shuswap point base
II	8	II	1	Kamloops point
II	4	V	2	Kamloops point