

4. THE OUTER CITY:

INTRODUCTION AND SURFACE COLLECTION

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4.1 Introduction — G. Buccellati and M. Kelly-Buccellati

During the two short seasons of work at Mozan reported here we concentrated on surveying and excavating the High Mound; at the same time, however, we also developed a concern about the Outer City. Research in the Outer City appeared promising for a number of reasons. In the fields south and east of the site we had found two wells with third millennium pottery scattered by the mouth of both. It was unclear whether or not the wells themselves were ancient, but the ceramics did not indicate a period later than the third millennium. One of the wells was stone lined, and the local villagers indicated that this well was not of recent date. They also pointed out a spot on the High Mound where they said another well was located which had the same kind of stone lining; however the opening was covered and we did not investigate further.

We had also noted a gradual but regular and considerable rise in the ground around portions of the site, and this too needed to be investigated. Another interesting problem was to determine the nature and extent of a wide depression visible on the south-eastern portion of the site. Some aerial photographs seemed to corroborate the impressions which we had formed on the basis of ground observations, although the photographs were taken while the fields were still under cultivation, and thus do not afford the best view of the slight differences in relief (Illustrations 2-4; see the comments in the next section about the best conditions for "archaeological visibility").

There were two immediate problems in undertaking such as survey of the Outer City: (1) we did not have the staff to survey adequately such a large area, and (2) by the Spring of 1985 the fields had already been planted and it would have been very difficult to survey the area at all. It was at this point that we enlisted the aid of Dr. Judith Thompson-Miragliuolo, then living in Qamishli, who had already done extensive archaeological survey work in eastern Iran, and was thus well prepared to undertake this project. During the Spring 1985 season

we were able to define together the main goals and objectives for a surface survey of such a large area, a survey which she then carried out independently in the late Summer and Fall after the harvest. While the survey is not complete, it is of great significance for what it tells us in terms of the potential expanse of the lower city and the homogeneity of its deposit. Her account is given in the rest of this chapter.

4.2 Surface collection

From the top of Tell Mozan, as well as from aerial photographs taken in 1985 (Illustr. 2-4; *PDS-1* 3), it is possible to discern traces of what appears to be a slight ridge in various points around the main mound. This ridge or rise appears roughly equidistant from the High Mound in the points where it is visible, suggesting the possibility of an Outer City wall which could have encircled the tell some 300 to 400 meters from the main mound. Alternatively, the rises noted from afar could prove to be satellite occupation mounds. In either case, a determination of the existence of man-made topography in this circumference zone would have significant implications for a reconstruction of the urban environment of Tell Mozan and would be an indispensable adjunct to any statement regarding population estimates of the site.

It was to test the existence of such a rise, to estimate its extent, and to determine the nature of any artifact cover in the entire Outer City, that the Mozan Outer City project was begun in late summer 1985 with a surface survey involving controlled collection and topographic mapping.

As in most of this part of the Khabur Triangle, Mozan is situated in the midst of an agricultural zone; all of the land adjacent to the tell for many kilometers around is currently or has recently been farmed so that the agricultural cycle has considerable importance for a surface survey. Fieldwork was begun in September 1985 immediately following the harvesting of the survey area, and was completed by December, when most of the fields in the area had been plowed. It was deemed important to examine both the supposed rise and the level ground which separates it from the main mound itself. The aim was to determine the volume and variability of surface cover over as wide an area as possible before the late autumn rains began to make surface collecting impossible.

Although homogeneity of the surface area could not be assumed, a random sample was attempted as the best means of covering the survey zone in the time period available. A 100-meter grid was extended on paper from a known point (A) on the highest point of the main mound to a distance of some 300 meters from it in every direction. All squares which encompassed the High Mound or the mound's talus, as well as several which were inaccessible due to modern habitations and a vineyard, were eliminated from the population to be sampled (the surface survey of the main mound is published elsewhere in this report, see Chapter 3). The remaining 72 squares were subdivided into sixteen 25-meter squares each, which were manageable dimensions for a surface collection. Of these 25-meter squares, over 70 were selected, using a table of random numbers, to arrive at a 7% sample. At the end of the season only the northwestern portion of the survey zone remained unsampled due to the impassable conditions of the fields under cultivation; this portion will be completed during the next season.

The ten-meter square in the southwest corner of each selected 25-meter square was

exhaustively collected to give a basis for the comparison of artifact volume among the sampled units. Ten by ten meter squares were seen to be the maximum area to which adequate controls could be applied for a complete collection of artifacts. The remainder of each 25-meter square was then systematically surveyed for a more selective collection of diagnostic material. [Each 100-meter square is designated by two numbers: the first refers to the North coordinate, and the second to the East coordinate, counting by hundreds in each case. Each 25-meter square is designated by two letters using the convention explained graphically in Figure 6. — G. B. and M. K.-B.]

Contours of the Outer City area were taken in the eastern and northeastern portions, but due to logistical problems, topographic mapping was not completed this season; this also will be finished during the 1986 season.

A total of 49 of the selected squares, as well as 13 additional sampling units, were collected before December 1985. From the sketch map based on observations in the field after removal of the plant cover by cultivators, and from the partial contour map (Fig. 6), it may be seen that a rise is clearly present at a distance of some 200-400 meters from the base of the tell in what appears to be a concentric ring. This ring encircles the tell from the southwest to the east and then from the northeast to the northwest; it is highest and most clearly apparent in the south-southeast, where the artifact cover is concomitantly densest. There are three gaps in this concentric ring to the east and northeast and one small gap on the southeast. Immediately west and west-northwest of the tell a rise is not discernible by eye, although traces of the rise which continues from the north gradually diminish and eventually disappear in the vicinity of currently inhabited Mozan village. The local inhabitants have plowed this area for at least a couple of centuries, possibly contributing to the erosion of the rise in this part of its circumference. Artifact cover is correspondingly lowest in density in this area. The rise may be slightly elliptical, extending farther from the High Mound (up to 500 meters) in its northwest portion where Os4 is located. The width of the rise appears to be generally between 50 and 100 meters; height variability cannot be determined until topographic mapping is completed. As is to be expected, detection of the rise is enhanced in late autumn after the first rains have fallen and have been followed by a dry spell. Moisture drains from higher ground to lower-lying areas; when viewed from the top of the High Mound, this differential drying causes the rise to appear lighter in color than the lower plain. Just beyond the concentric rise on the south a 100-meter wide depression is also clearly evident, appearing to follow the rise toward the east; its significance is not clear at this point, but it may be a part of an ancient watercourse or moat.

Disturbance of the surface within the area between the base of the High Mound and the outer periphery of the rise is considerable in some locations. Several unpaved roads cut across the peripheral ring, three of them actually slicing through the apparent rise. In several locations on the crest and slopes of the rise there are signs of deliberate unauthorized excavations. The entire area is currently, or has been in the last few years, cultivated for the production of wheat, with a large vineyard on the northwest adjacent to the High Mound, an irrigated cotton field in the southeast, extending up onto the rise, and an irrigated garden in the western portion near a recently dug well. Wheat fields are plowed twice in the late Autumn and Winter before sowing; harvest is during the summer months and in early autumn herds of sheep and goats are brought in to crop the stubble. Archaeological visibility is greatest (i.e., artifacts are most visible on the surface) after grazing and before the first plowing,

and then again after the second plowing when the light showers which precede the heavy winter rains have washed the artifacts from the loose earth.

For recording purposes, the survey area (the Outer City) as a whole was designated Oz1, or simply z1. [Upper case "O" stands for Outer city, lower case "z" for the entire Outer City, and lower case "s," on which see presently, for special areas. Use of upper case "O" is not required, but it can be useful when contrasting areas from the Outer City with the High Mound; areas on the High Mound are designated with single, upper case letters. — G. B. and M. K.-B.] Eight specific locations within the Outer City were assigned separate unit numbers from Os2 to Os9 based on the presence of significant ceramic concentrations, often accompanied by features such as wells, depressions, or pits. Os2 is a small test excavation carried out in the second season during the late spring of 1985, the results of which were somewhat inconclusive. Os3 is an area on flat ground some 100 meters east of the High Mound where two disused wells are located — one of these is relatively recent (within 50 years) and the other was exposed by Mozan villagers during plowing and is associated with third millennium ceramics and a heavy concentration of human bones. Os4 is an area 500 meters north of the High Mound where a tractor uncovered concentrations of ceramics, some of them whole vessels. Os5 is a similar area on the crest of the rise east of the High Mound where a ten-meter wide shallow pit was still open, indicating recent disturbance of the location. Os6 is again an area with a heavy concentration of ceramics, this time on a slope of the rise where it appears to have been eroded or worn away, exposing freshly broken Metallic ware sherds in great numbers. Os7 extends for some 100 meters along the crest of the rise and is characterized by signs of dozens of small refilled pits indicating deliberate disturbance of the surface; one pit was made within days of my examination and was still open and scattered with freshly fractured sherds of large, heavy vessels. Just 50 meters to the west is Os8, where a well was discovered by villagers digging an irrigation channel. Like the well at Os3, this one is associated with third millennium ceramics, but, unlike Os3, it is located on the crest of the rise. The final location was a square sampled outside the grid to the south on the crest of the highest portion of the rise; this square yielded the greatest amount of material.

In all, eight probable locations of wells were found on the survey, including those with early ceramics at Os3 and Os8, both of which are lined with large unmortared stone. Six were said to have been dug within memory of the oldest villagers at Mozan. While sinking several of the more recent wells, villagers had found many items of archaeological interest, few of which remain in the villagers' possession.

Other features of the Outer City include a row of large (1 m. by 1/2 m.) stones removed from fields on the rise east of the High Mound and two larger (2 m. by 1 m.) stones on the top of the rise north of the High Mound. Within 200-300 meters west of these latter, three shallow areas were found where similar large calcareous stones had been excavated. These seem to have been worked into rectangular shapes and had been chipped and broken by farmers attempting to break them down for removal and clearing of the fields. At scattered locations all around the rise, large calcareous stones, obviously imported into the area, had been exposed during plowing and removed to the edges of the fields. [A number of these slabs line the edge of the vineyard on the northwestern slope of the tell, and many more are found scattered throughout the village at Mozan. — G. B. and M. K.-B.]

4.3 Relative percentages

During the survey some 14,000 artifacts were collected from the surface and tabulated according to the provisional types established during the first two seasons at Mozan. Typing was made difficult by the fragmentary nature of sherds on the surface, as well as their often heavily weathered and abraded condition, but the material in general displays a clear affinity with the third and early second millennium material found on the High Mound itself and in the excavations there. Predominant are Wet Smoothed, Simple, and Chaff-Tempered wares, with good numbers of Metallic, Pebble-Tempered, and Rough wares as well (for a description of these ceramic wares see above, Section 3.4). Also in evidence are Habur and Halaf painted wares, Ninevite V Incised ware, and several other types. Out of the approximately 14,000 sherds, less than ten were glazed. Ceramic types may be summarized as follows, in decreasing order of frequency (see Figs. 27-32 for drawings of representative samples):

Wet-Smoothed ware — 32% of the total artifact count: This was the major type in practically every controlled collection sampling unit. Of this major type, almost 40% came from the southeastern portion of the rise.

Unidentified — 16% of the total artifact count: In the ten-meter complete collection areas, all sherds, even the smallest, were collected. Many of these were of such minute size that identification by type was not possible; these comprise the bulk of the unidentified category.

Simple ware — 15.5% of the total artifact count: There are three definite concentrations of this ware — one is at square 98Da where Simple ware constitutes 21% of the sherds collected, another encompasses four squares east of the High Mound and the third is on the rise southeast of the High Mound in an area which includes seven squares. The proportion of Simple ware is low on the rise south of the High Mound at Os9 (5%) and on the west (8%; see Figure 8).

Chaff-Tempered ware — 14% of the total artifact count: This ware is present in all the sampled units but is less well-represented in the south-southeast and the south, while it is found in high proportions (above 20%) to the west and east on level ground and on the rise near Os5.

Metallic ware — 7.6% of the total artifact count: In most collected squares, Metallic ware composed 4 to 6% of the sherds. However, the most notable concentration of any type encountered during the survey occurred in the extreme northeast corner of the survey area, where Metallic ware is fully 87% of the 241 sherds selectively collected from Os6. It is interesting to note that three squares bordering on this Metallic ware concentration zone were completely without Metallic ware, as were only two other squares from elsewhere in the Outer City. Square 98Da, near Os6, had more than 20% proportions of both Pebble-Tempered and Simple wares.

Pebble-Tempered ware — 4% of the total artifact count: As with Metallic ware described above, Pebble-Tempered ware is also absent from the three squares near 98Da. Square 98Da itself had a 20% concentration of Pebble-Tempered ware as mentioned above. There are no other concentrations of Pebble-Tempered ware but there are two areas where this ware is significant in its absence: the zone mentioned above where a total of six squares has no evidence of this type, and another of five squares in the east-southeastern portion of the Outer City.

Rough ware — 1.7% of the total artifact count. Rough ware in no instance comprises more than 6% of any one square's collection; more often it occurs in 1 to 3% proportions while many sampling units lack it altogether. No clustering of this type is evident.

Mica Grit ware — 1% of the total artifact count: This ware occurs in only slight quantities throughout the survey area but more so in the eastern portion than elsewhere. The lowest quantities of Mica Grit ware are found in the south and west.

Other types — comprising altogether another 7% of the total artifact count: These include most decorated wares such as Habur painted, Ninevite V Incised, Ur III modelled rope designs, and Halaf painted. None of them ever comprises more than 1% of the collected sherds from any one unit.

Flaked lithic material — A total of 36 blades and blade fragments were recovered, as were two cores, five retouched flakes, and one awl. In most cases the material used was a medium grade flint or chert, ranging in color from black to light tan, but four blades were manufactured from translucent obsidian. Three of the blades display a silica sheen, indicating their use for cutting vegetable matter, and two blades were denticulated.

Groundstone — Six groundstone objects were collected from the surface: a rough cube, a sphere, one with three flat surfaces, one with one flat side opposite a circular depression suggesting usage as a hammerstone or small mortar, and one object perforated from two directions. In addition, a distal fragment of a polished groundstone celt was found on the Outer City surface.

Other stone objects — A perforated stone cylinder with a completely abraded surface was found by a Mozan villager on flat ground approximately 200 meters southeast of the tell, an unfinished pink stone bead was recovered from Os7, and a fragment of cut and polished red marble was collected on the rise north of the mound.

Metal — Only one copper/bronze item was found on the surface of the survey area: a pin or shaft fragment in square 09Cc on the southeast rise.

Animal figurines — Fifteen fragments of animal figurines in baked clay were collected from the surface, most of them from seven locations on the eastern portion of the rise. One, a small horse with male genitals and faint incised lines on its mane, was almost complete. Eight of the fragments were the torsos of quadrupeds missing head and limbs, and the remaining six are head fragments. Of these, one appears to be a bull's head with one long, curved horn (the other broken off), a painted red band extended from between two applied eyes down the full dorsal length. Another head fragment also has one horn, ears, one eye depression, and incised lines on its dorsal surface. A third head is missing its muzzle but has an applied band across its top and incised circles which may represent curly hair. A fourth head has a long neck and two eye holes separated by a deep groove. The remaining two heads have long snouts and faint eye holes, one of them suggestive of a camel, although the third and early second millennia are thought to be too early for the representation of camels, which are believed to have been domesticated later.

Ceramic objects — Twenty-two miscellaneous objects of baked clay came from the surface of the survey area. Six of these are small wheel fragments, some of them completely perforated, some incompletely perforated. Another six are perforated disks made from sherds of Simple ware, two are perforated clay beads, and one is a very small perforated lump. Other pieces include a perforated spindle whorl, a perforated ceramic cylinder, a possible gaming piece with a circular concave base, a flat, roughly rectangular fragment, a large rough

cone-shaped object, a large squarish piece with a square socket, and finally an undefined piece marked with two incised holes separated by an incised X.

Reconstructible vessels — Five Metallic ware vessels are complete enough to be reconstructed; four are small jars from Os4 and one is a miniature bowl or cup from Os9. A miniature painted Habur ware jar was found on flat ground east of the mound and a support stand painted in red and black hatched triangles and checkerboard motifs was recovered at Os6.

4.4 Distributional patterns

Half of all samples taken were from level ground, either on the roughly level expanse between the High Mound and the outlying rise or in level gaps in that concentric rise. Of the 63 samples collected, 31% was collected on top of a definite rise and another 19% of the total was taken from the slopes of the rise. A marked difference in artifact density is evident between the rise and flat ground as may be seen in the fact that, while half of all sampled units were located on level terrain, the total percentage of all artifacts collected there during the survey was only 34%. A majority of artifacts (66%) was taken from the crest and slopes of the rise. The average density of artifact cover in the sampled squares appears to co-vary with the relative height of the rise. In the table below, areas of the Outer City rise are listed in descending order of height from level ground as judged in the field; artifact density descends roughly in accordance with height from the highest point along the entire rise (in the south) to the west, where no rise at all was apparent.

Rise Segment	Average Artifact Density per Square
South (highest)	1250
Southeast	306.6
East	332
North	252
Northeast	203
West (no rise)	63.8

This would seem to suggest that both natural erosion and human factors such as continual plowing and downcutting for roads have contributed to a disappearance of an original rise with cultural levels, as is true of many tells in the surrounding Khabur Triangle plain. This factor may be construed as additional evidence of a rise which indeed encircled the entire tell. On the other hand, differential artifact densities and the interrupted occurrence of the rise could indicate the presence of separate occupation sites, perhaps in the form of small satellite settlements. In the absence, however, of comparative data from other excavated sites of the third and second millennia, it is difficult to conceive of satellite hamlets occurring in such a regular concentric fashion around the High Mound, so that it is perhaps more reasonable to postulate a continuous zone of occupation from the inner city wall at the base

of the High Mound to an artificial boundary, perhaps in the form of an Outer City wall, on the outer circumference of the area of surface scatter. The density of artifact cover falls drastically immediately after the base of the rise on its outer face, confirming an artificial (cultural) boundary. The depression mentioned earlier, which clearly borders the rise on the south and southeast, should be examined in this regard. Its regularity could possibly represent a canal, although it is wide for a canal (at least 100 meters); extensive sampling by excavation would be required to test such a hypothesis.

The nature of the occupation attested to by material found on the Outer City rise is difficult to determine solely on the basis of a surface collection. The data are not sufficient to allow us to ascertain whether specific activity areas, such as food processing, manufacturing, communal storage, or defense, are represented. The widespread occurrence of large groundstone fragments, possibly of mortars, and the fact that approximately 25% of the total potsherds were of finer wares such as Simple and Metallic, points to domestic habitation activities; ceramic slag points to some pottery manufacturing. Large, heavy, handmade wares, which could have had a storage function, account for roughly 16% of the artifacts represented. A clustering of animal figurine fragments in the southeast may have some significance if such figurines were votive objects. Possible burial areas are suggested by human bones, including a molar at Os6 and several dozen bones at Os3. Likewise difficult to support with data obtained from the surface are definitive statements regarding areal variations, although some general observations can be made. As alluded to above, by far the highest density of artifacts in any one square occurs in the south at Os9. The eastern portion of the rise yielded the most animal figurines, as well as a high proportion of Chaff-Tempered ware; the northeast segment of the Outer City zone has a significant concentration of Metallic ware and somewhat larger proportions of Pebble-Tempered and Mica Grit wares. The western area yielded the lowest density of artifacts. All of these wares are worthy of closer examination, as is the possible disappearance of the rise in the northwest and the west. Further interpretation of the results of this season's survey must await additional analysis. Further surface surveying is required for the collection of more data to allow more sophisticated statistical analyses such as trend surface analysis. It is to be hoped that excavations will be undertaken in selected areas such as Os9, with its dense artifact cover, and Os6, with its Metallic ware concentration, in order to facilitate the interpretation of the Outer City concentric rise, which appears contemporary in almost all respects at this point with what is known of the third millennium occupations on the High Mound itself.

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FIGURES

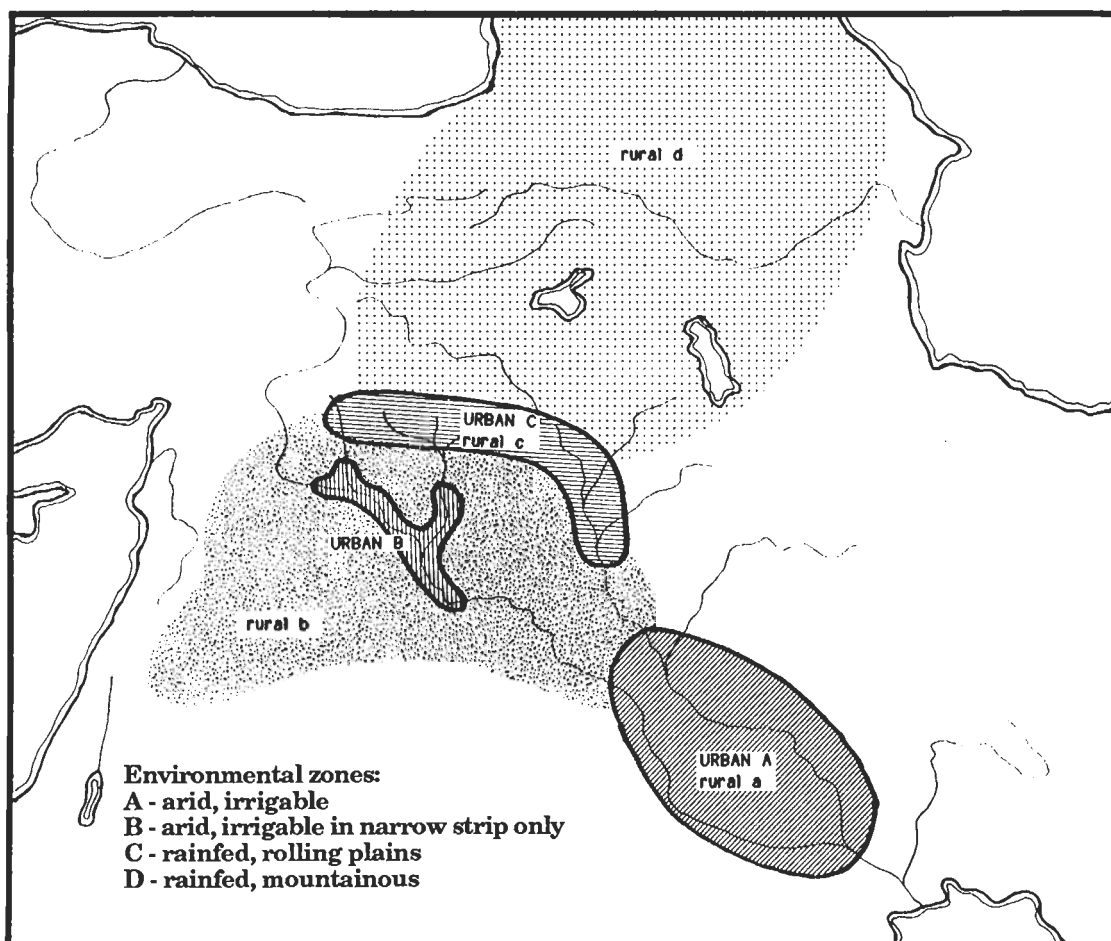


Figure 1. Rural and urban zones in Syro-Mesopotamia during the third millennium

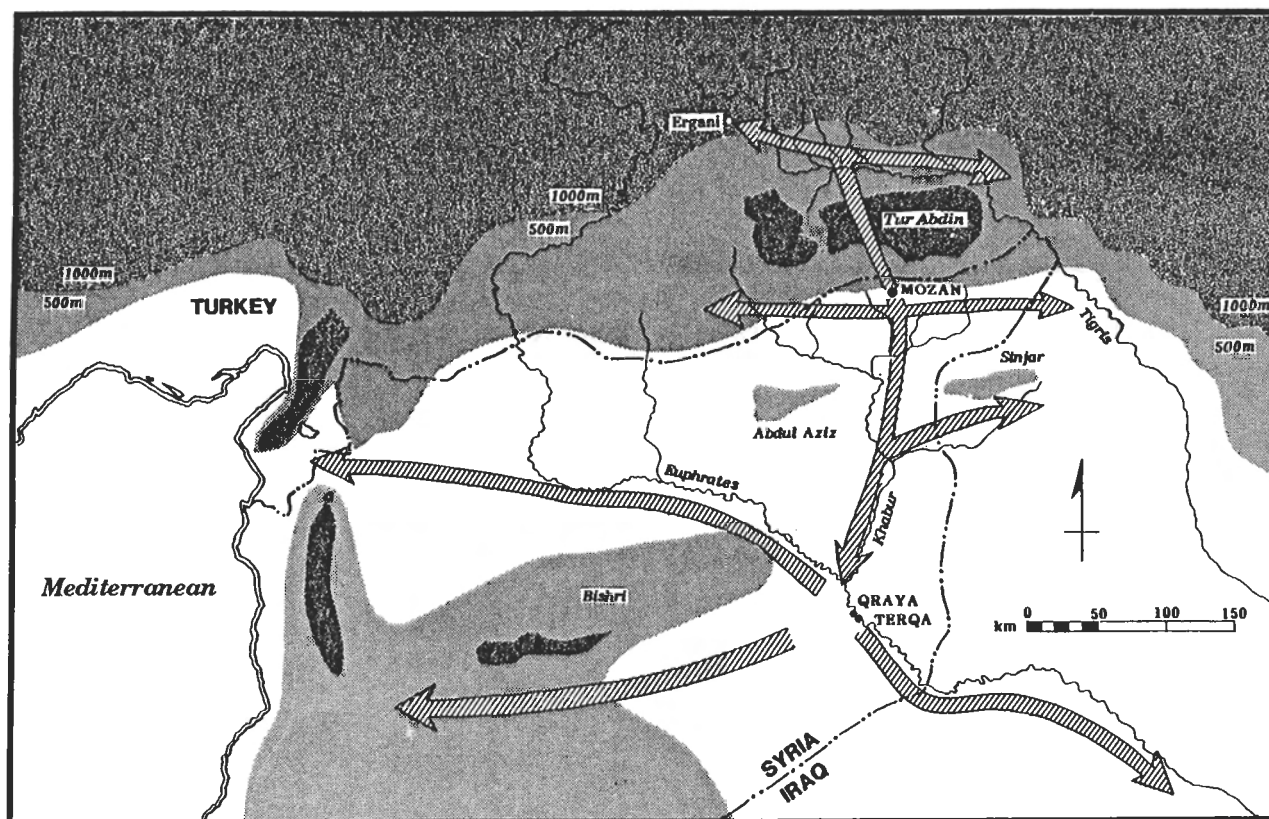


Figure 2. Major trade routes

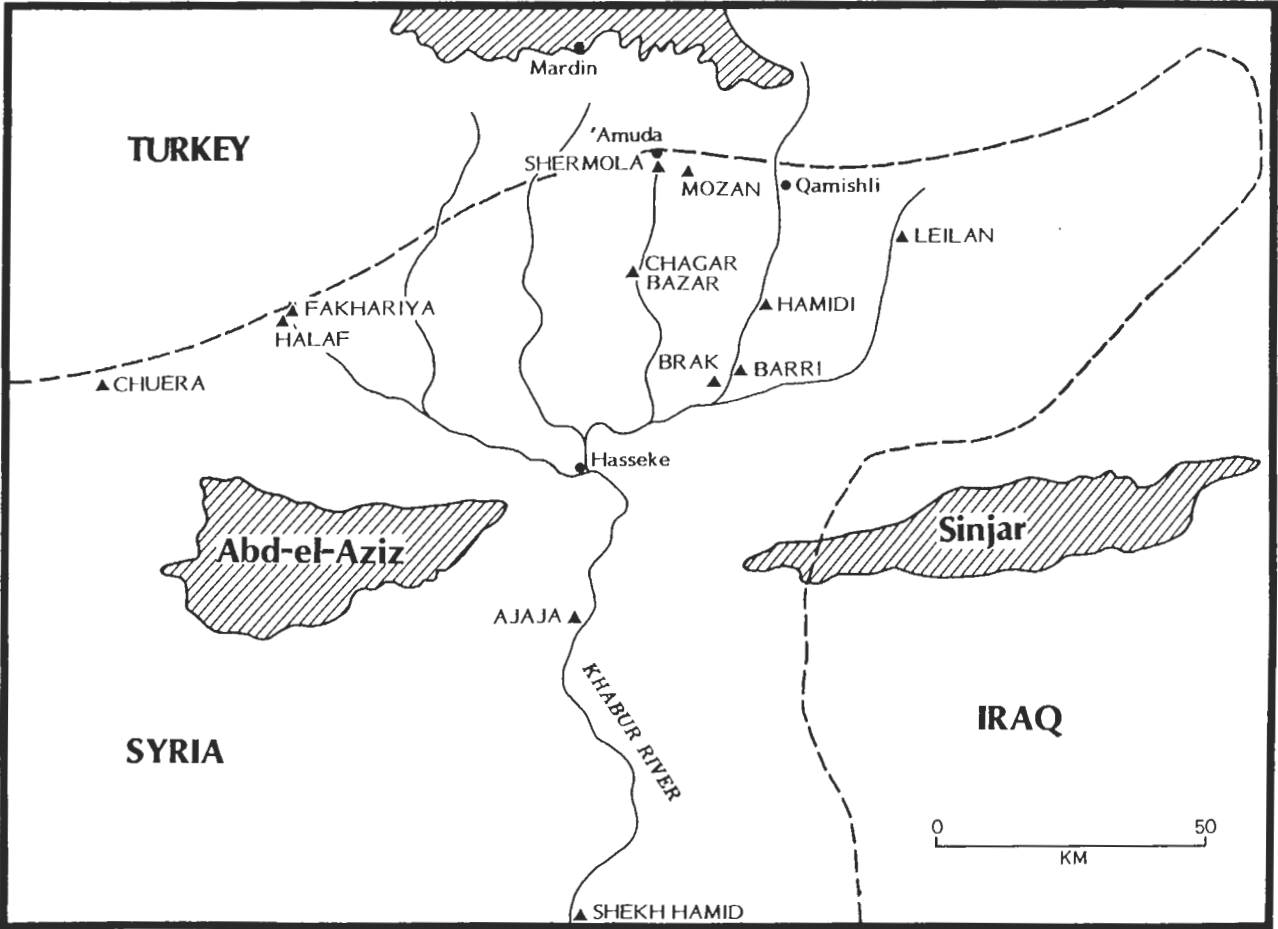


Figure 3. Major sites in the upper Khabur region

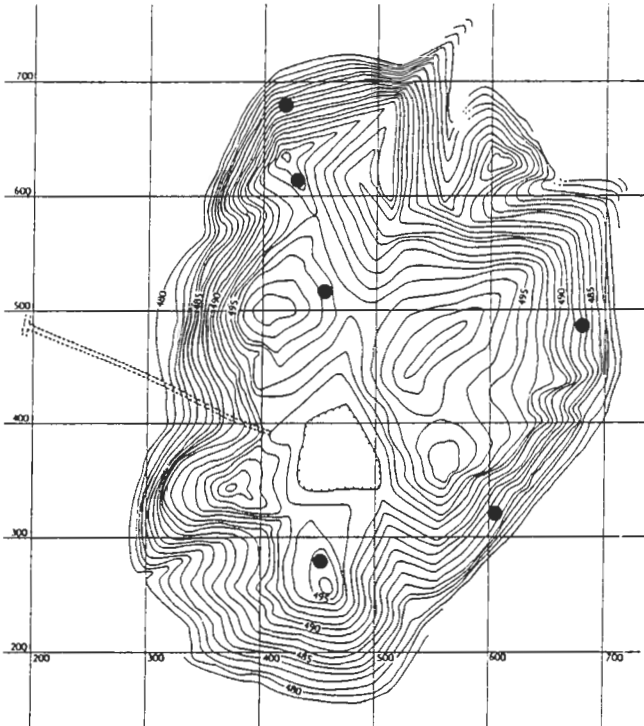
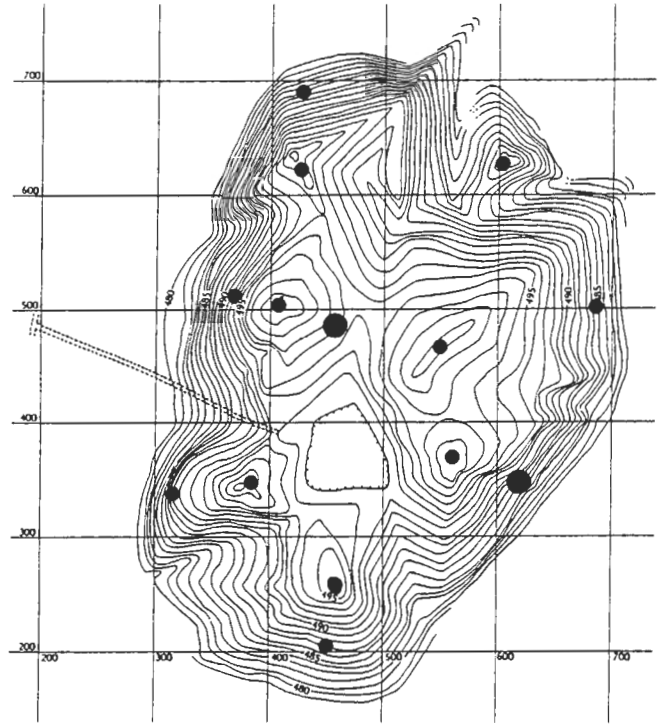
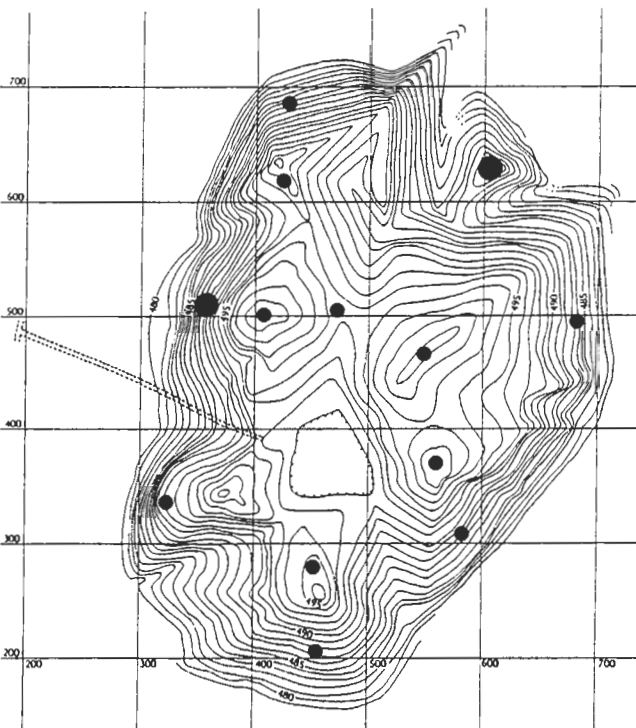
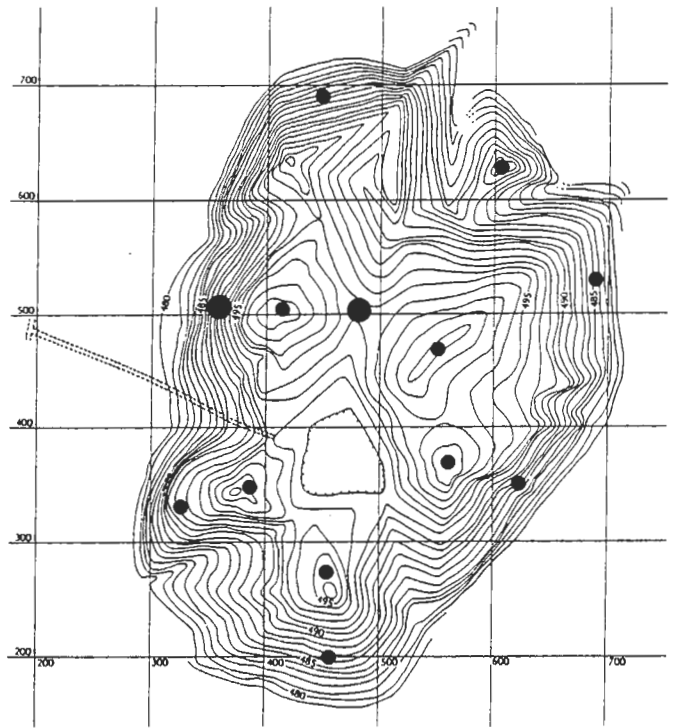
EARLY THIRD MILLENNIUM (NINEVITE V)**MID THIRD MILLENNIUM****LATE THIRD MILLENNIUM (UR III)****MID EARLY SECOND MILLENNIUM (HABUR)**

Figure 4. The High Mound: Distribution of ceramic wares by period

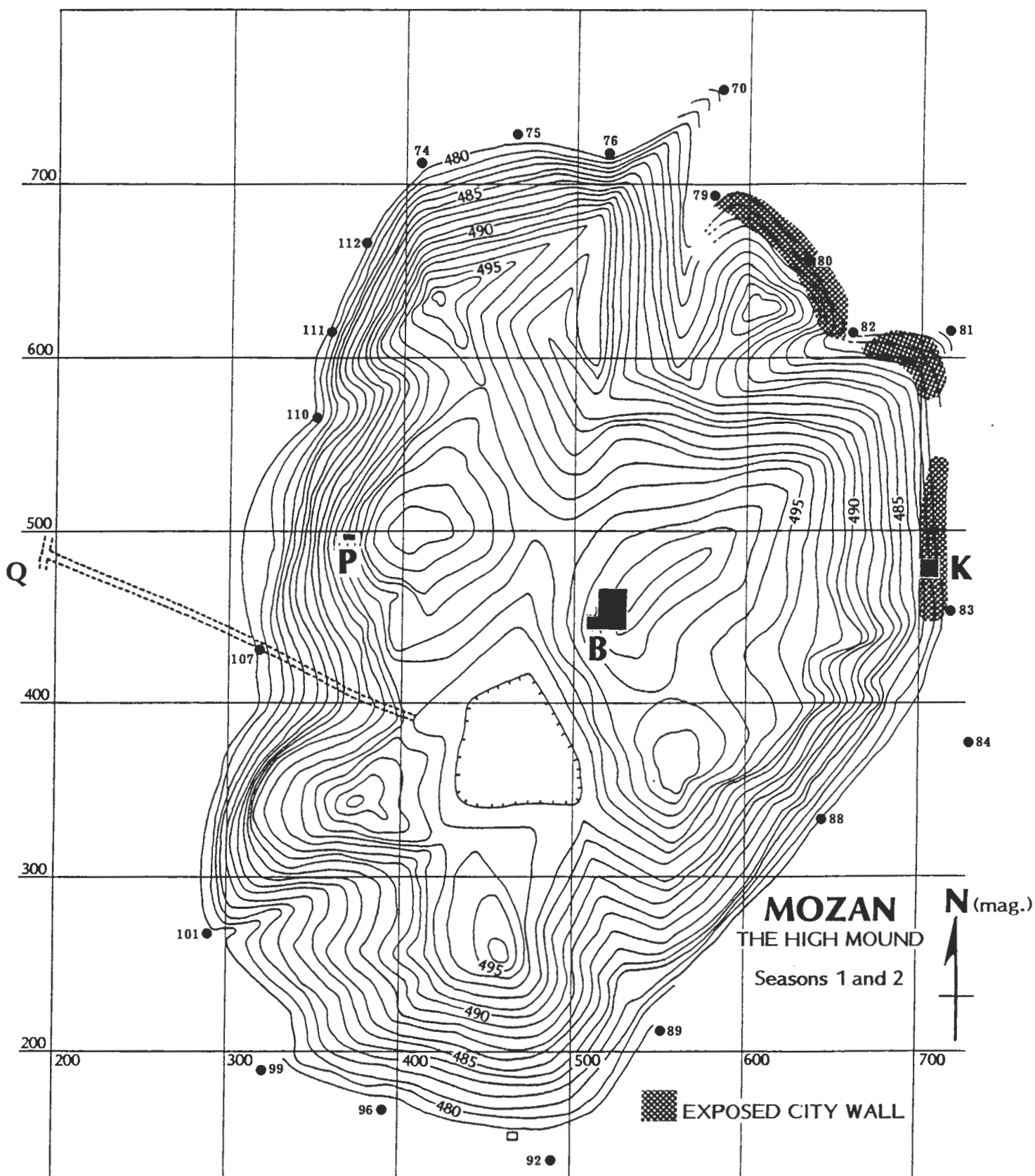


Figure 5. Tell Mozan: Topographic map of the High Mound

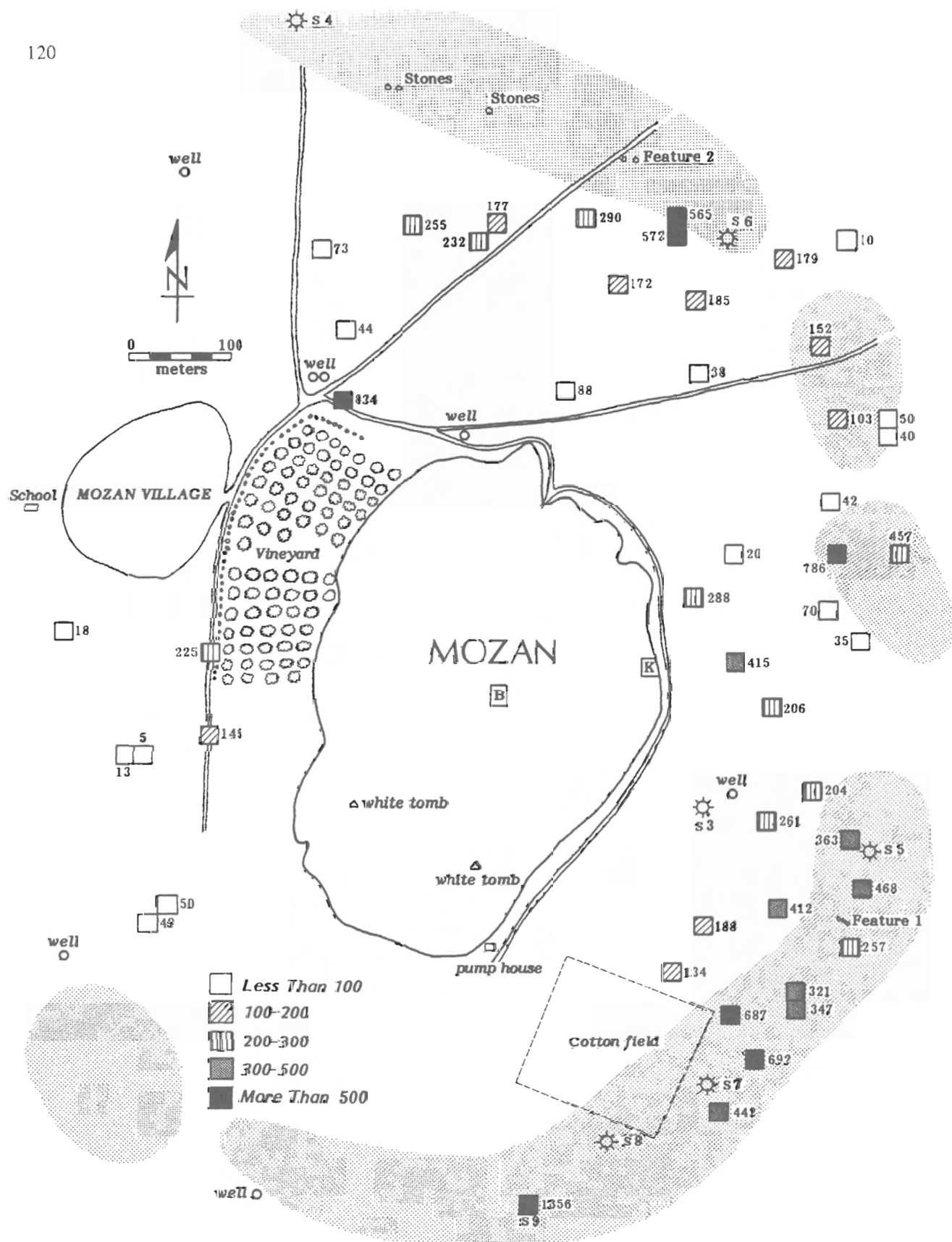


Figure 7. The Outer City: Distribution of ceramic wares by total number

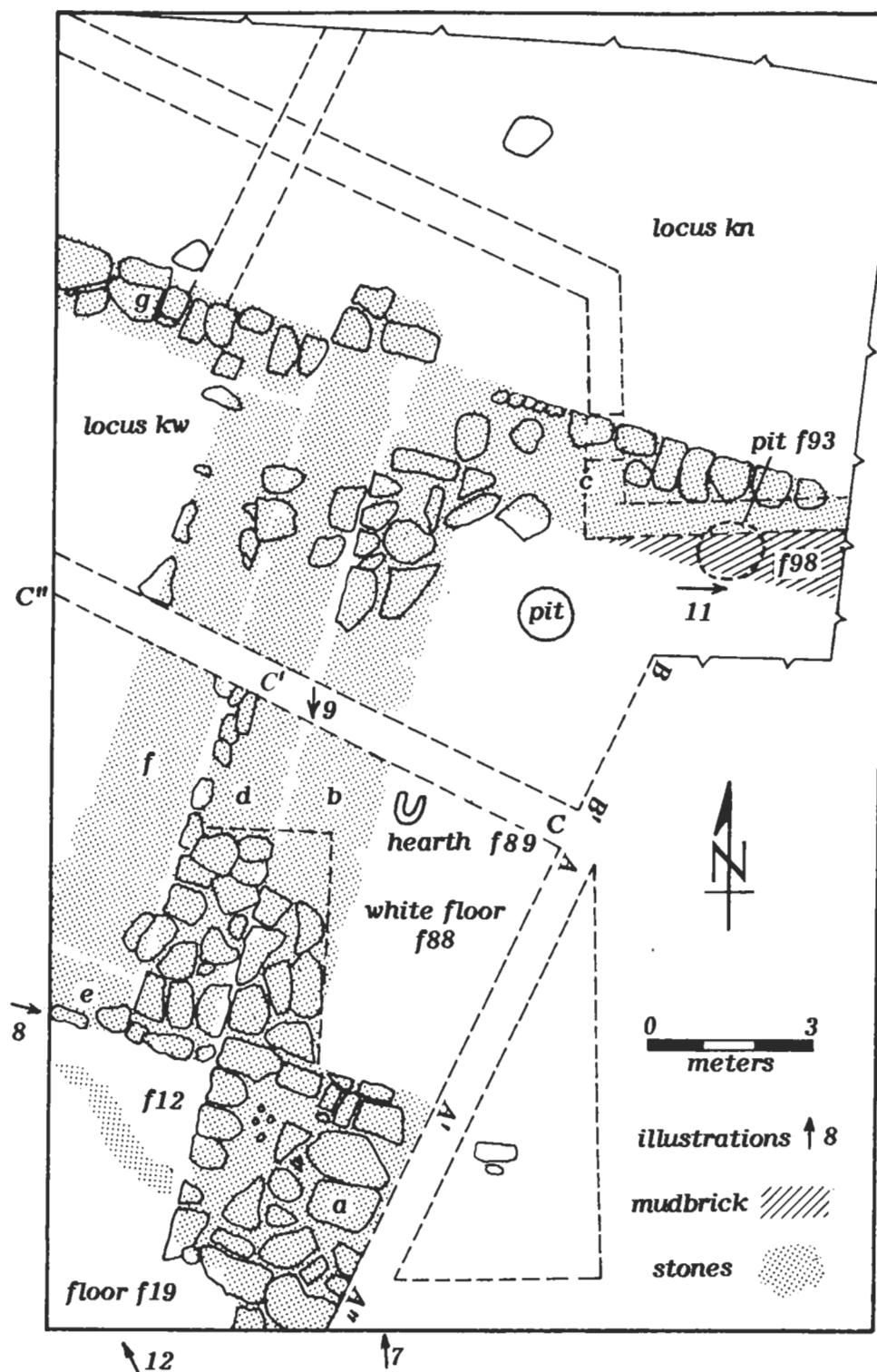


Figure 9. The stone building in Area B: sketch floor plan

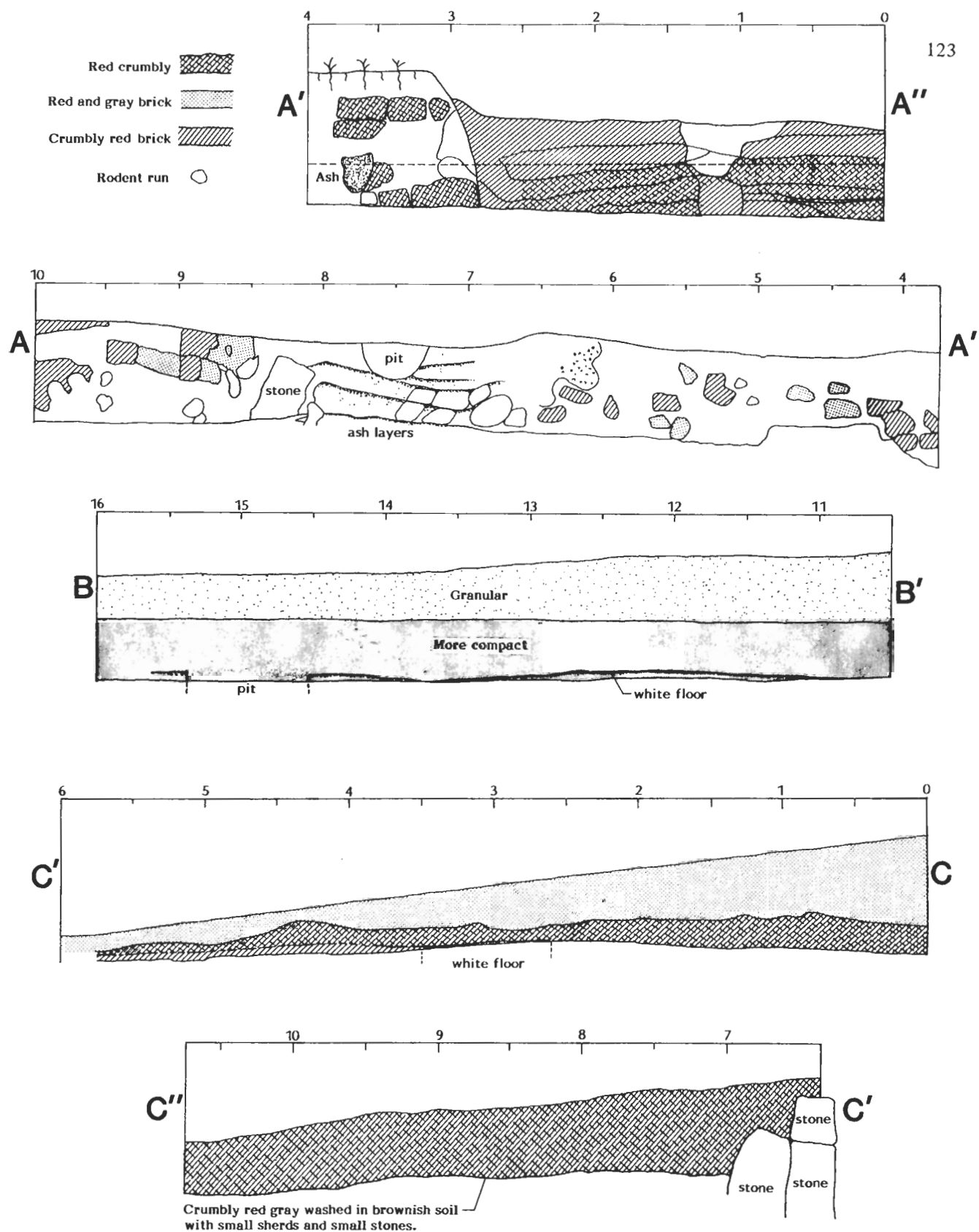


Figure 10. The stone building in Area B: sections

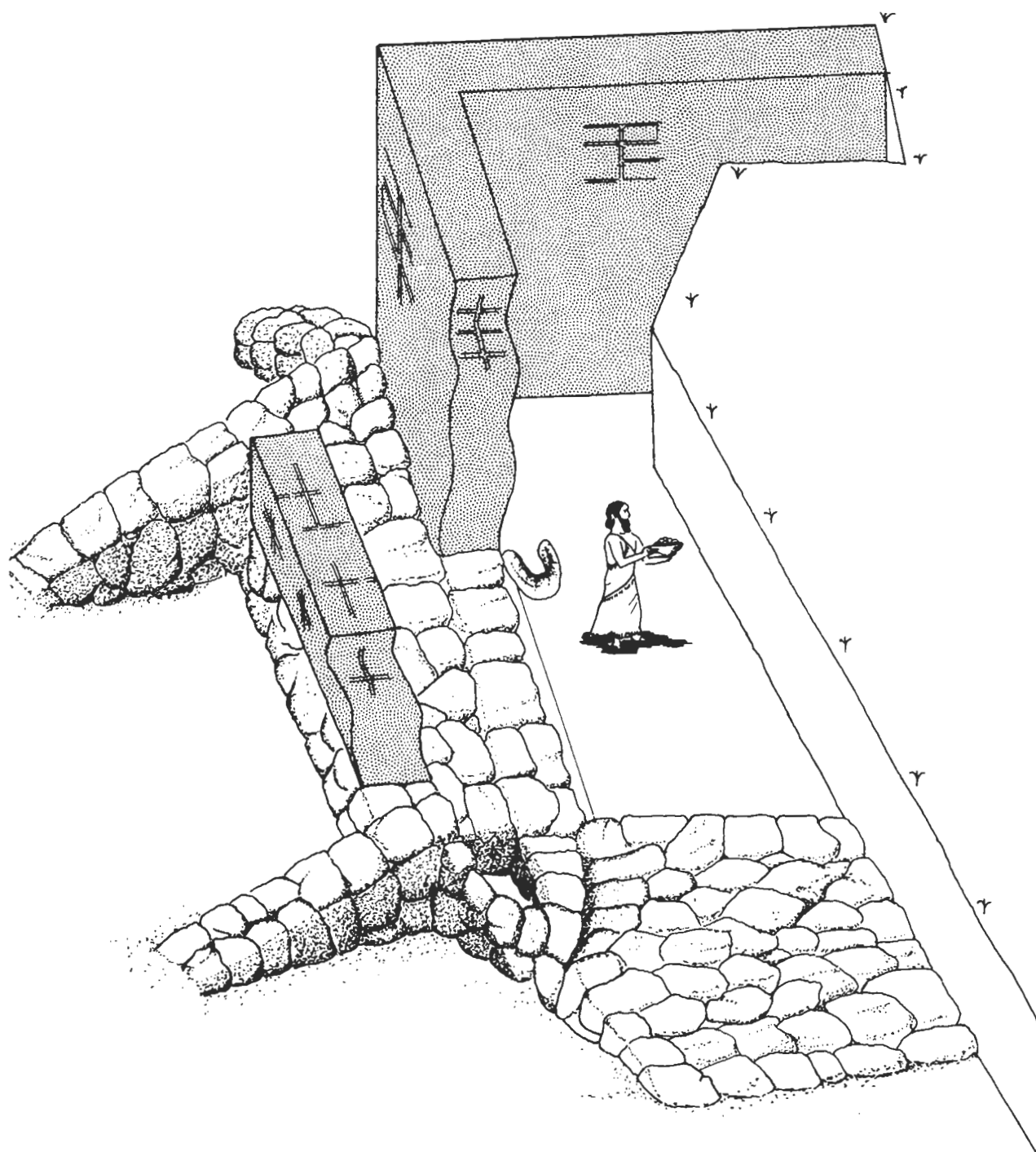


Figure 11. The stone building in Area B: reconstruction

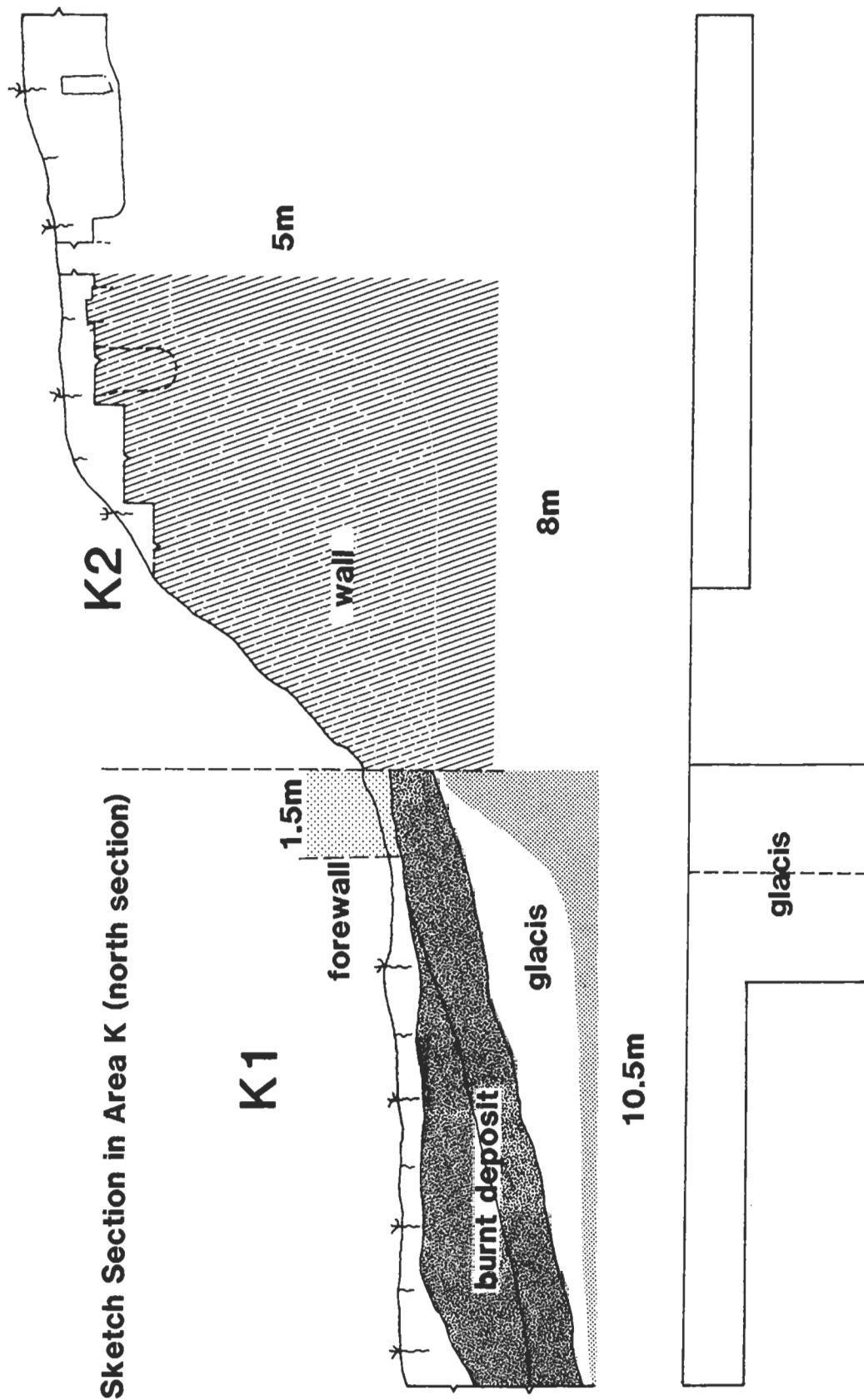


Figure 12. The city wall in Area K: sketch section

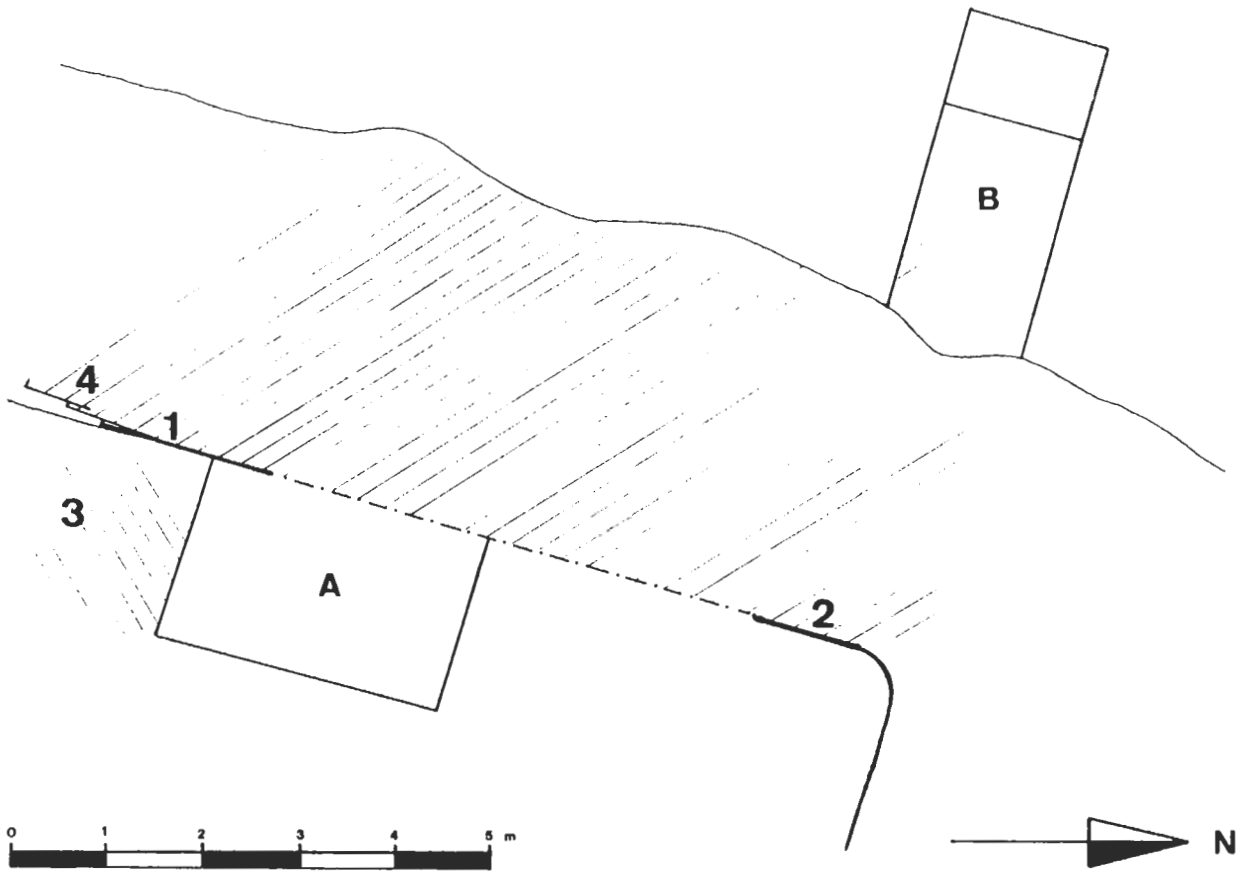


Figure 13. The city wall in Area K: floor plan (1984 season)

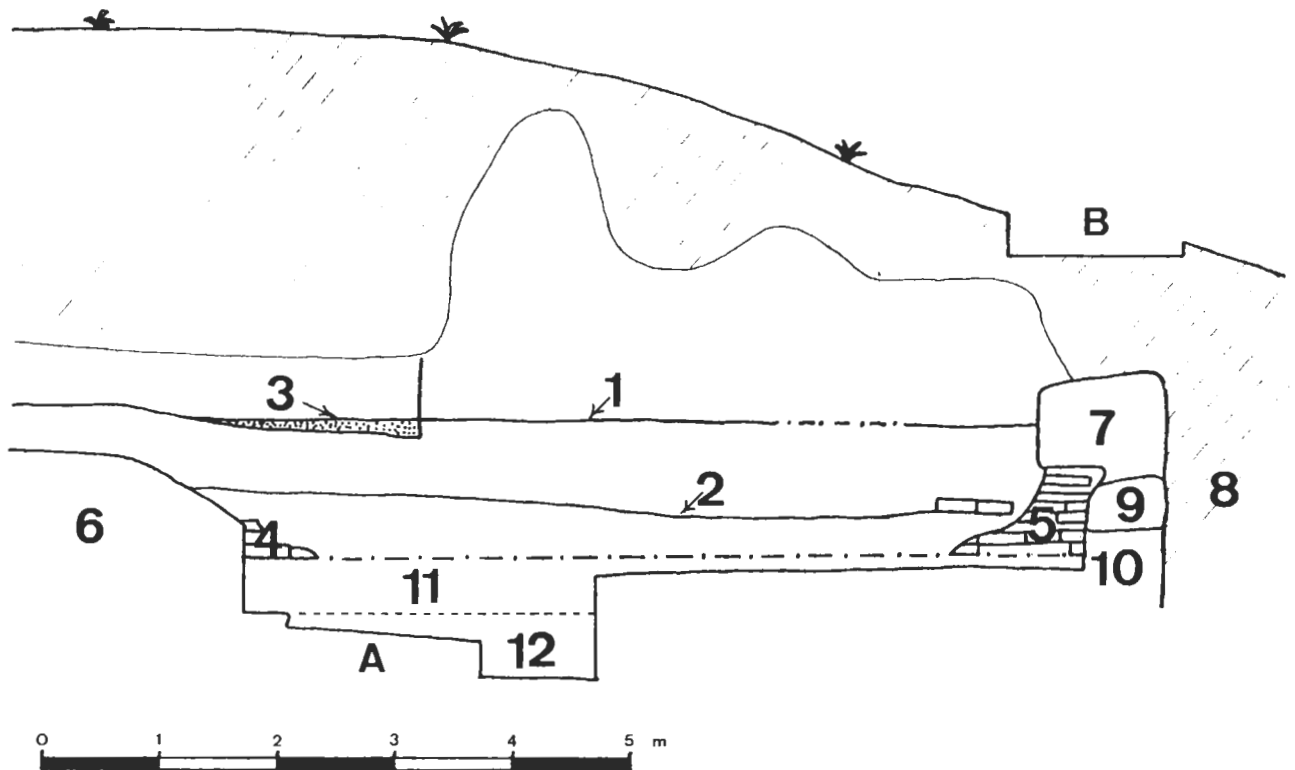


Figure 14. The city wall in Area K: frontal view (1984 season)

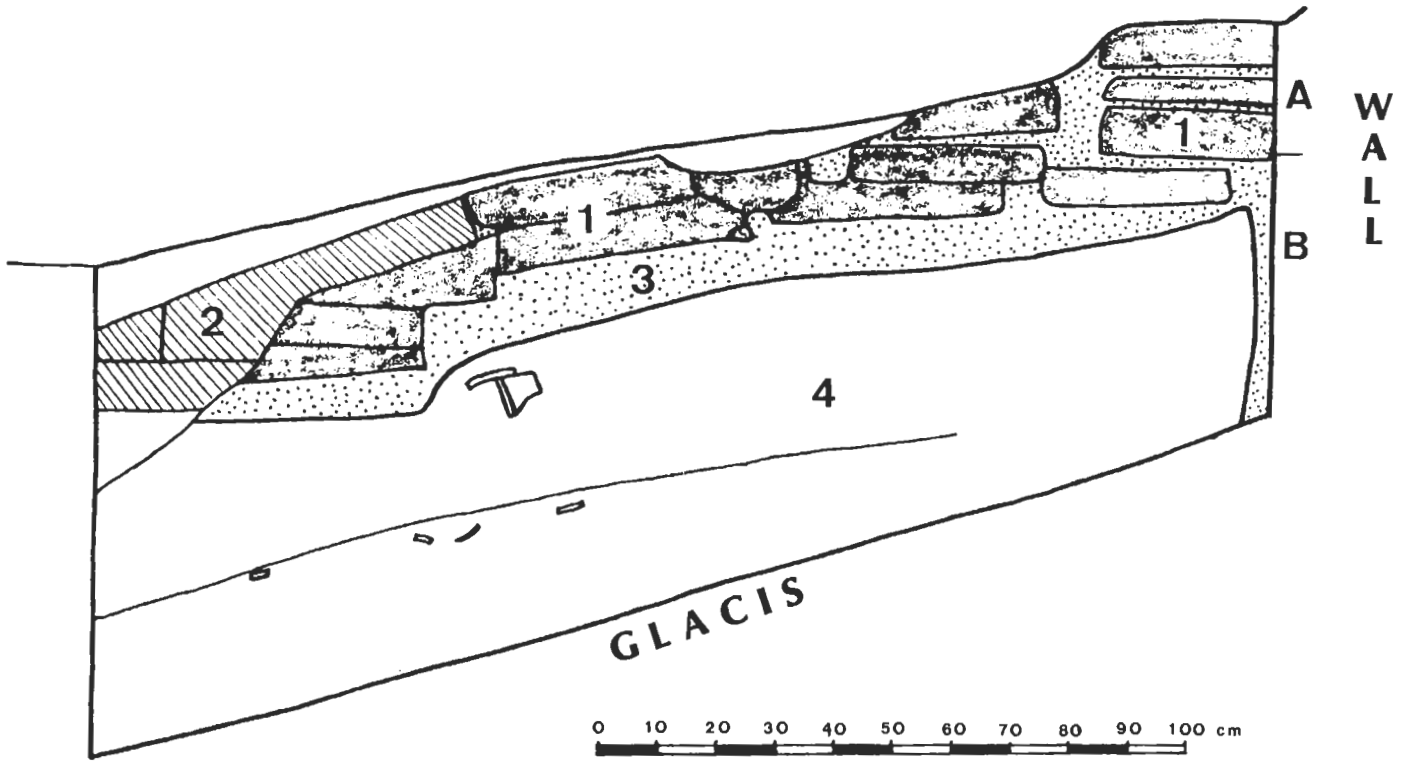


Figure 15. The city wall in Area K: North section of Locus A

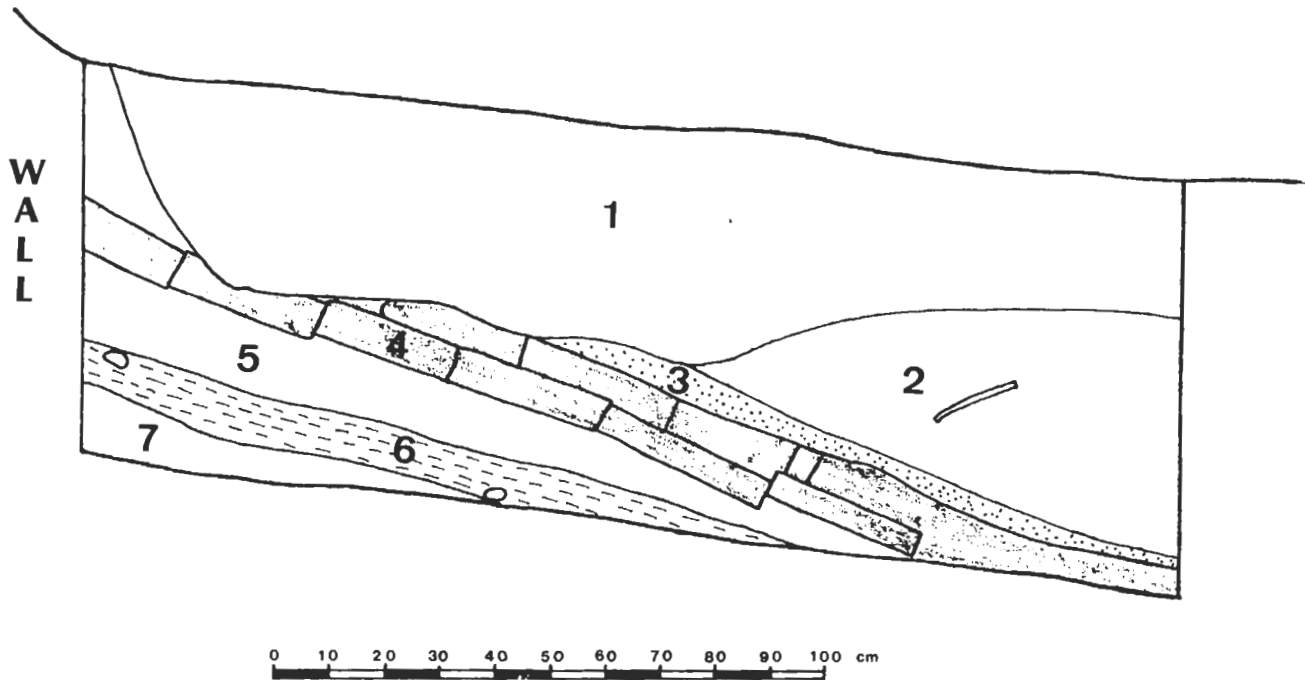


Figure 16. The city wall in Area K: South section of Locus A

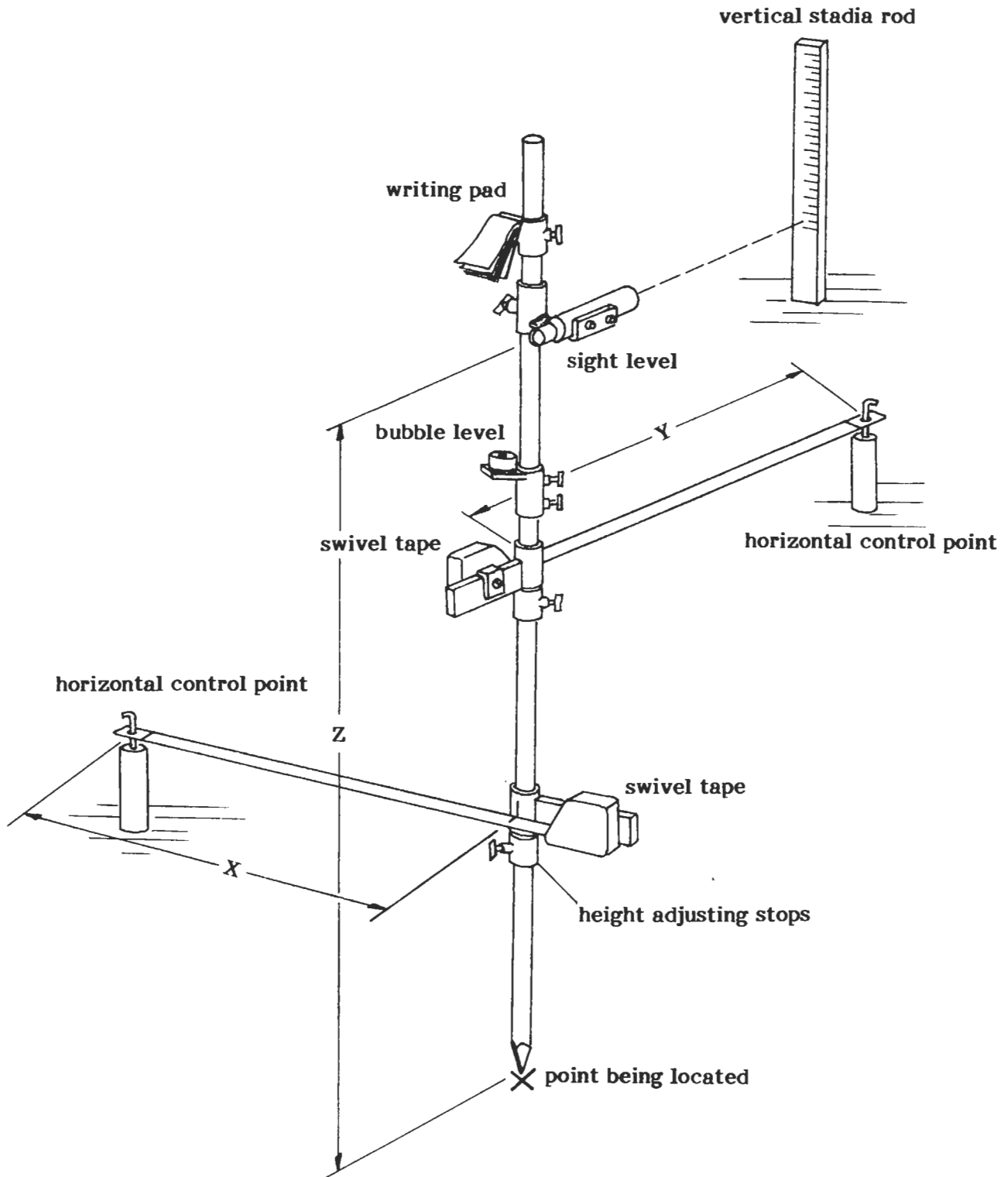


Figure 17. Sketch of triangulation rod

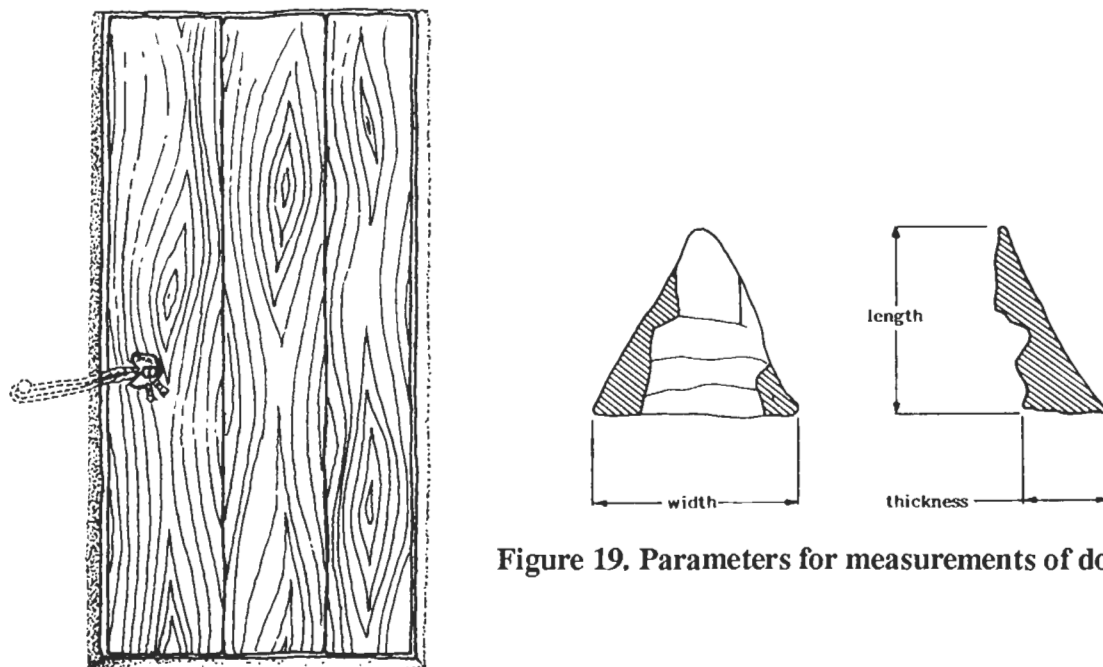


Figure 19. Parameters for measurements of door sealings

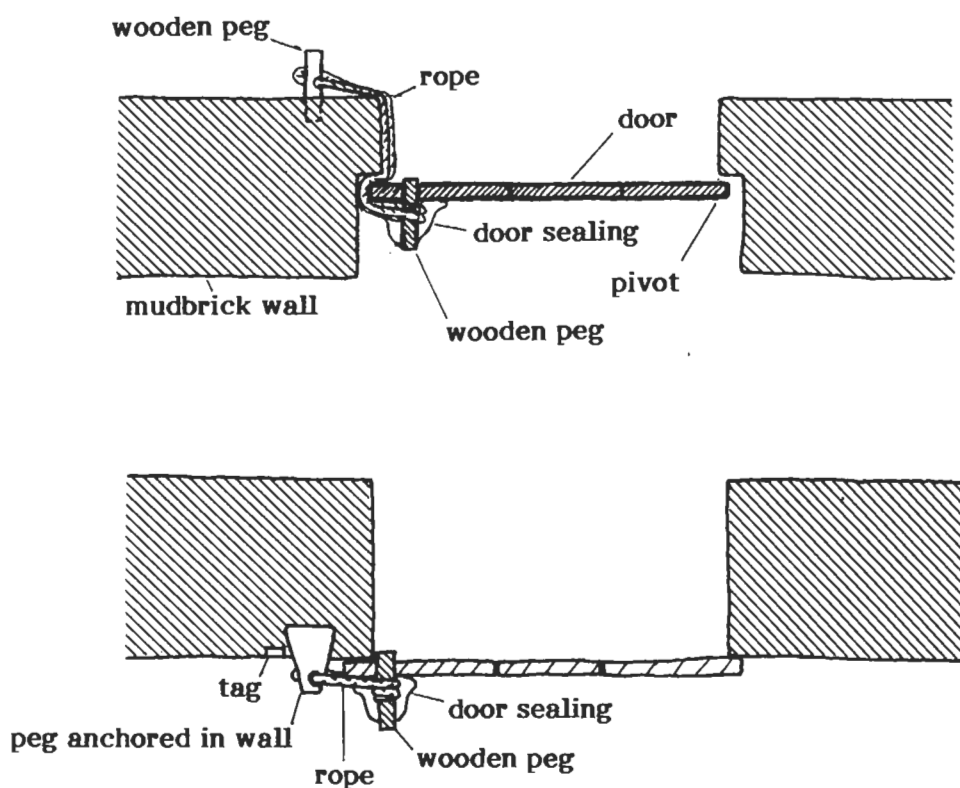


Figure 18. Suggested reconstructions of the use of door sealings

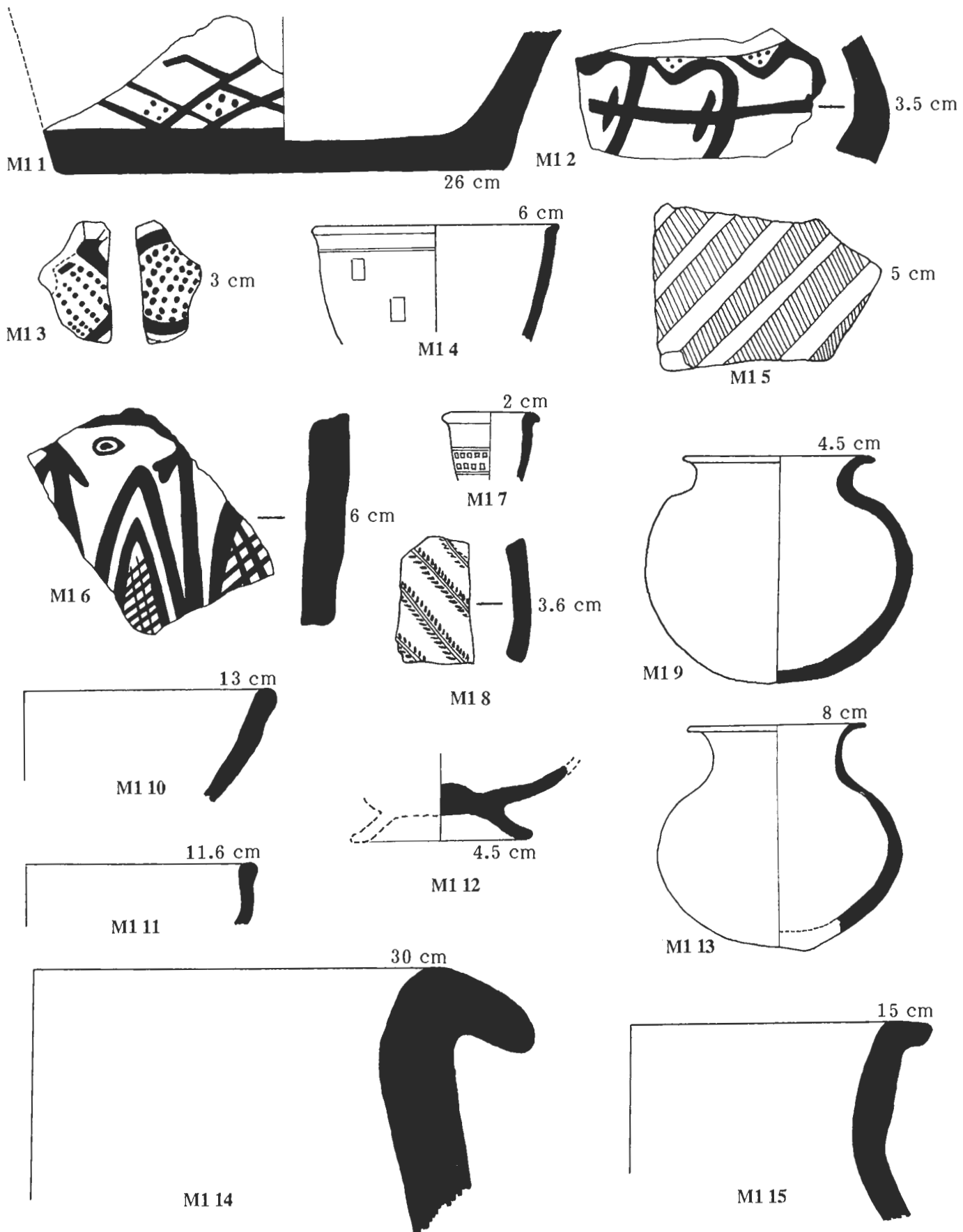
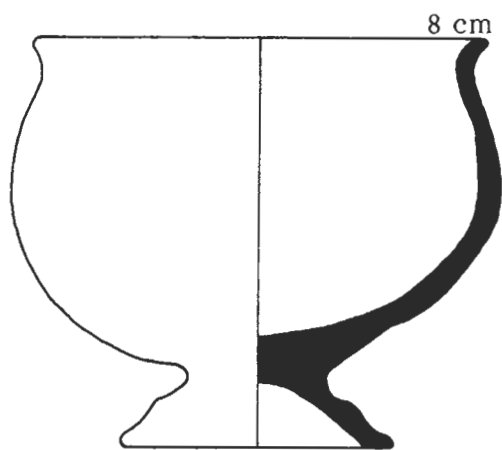
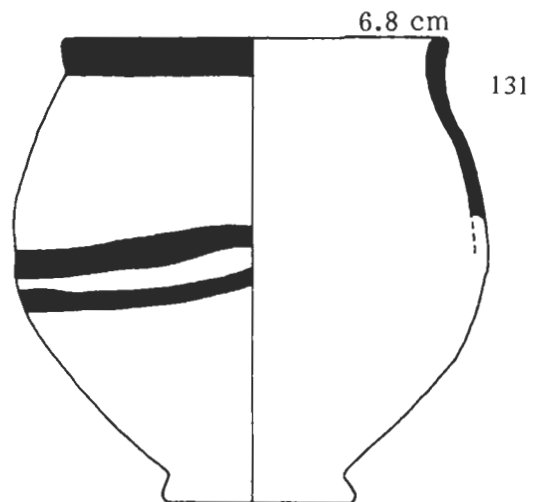


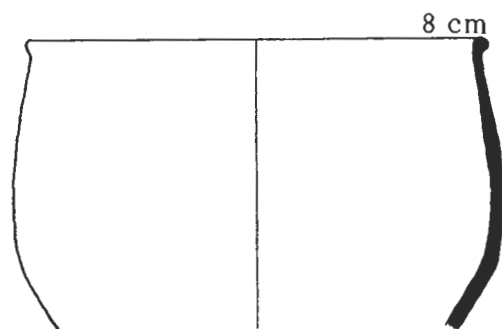
Figure 20. Ceramic types from the surface of the High Mound
Halaf (M1 1-3), Incised Ninevite V (M1 4-5, 7-8), Painted Ninevite V (M1 6), Metallic ware (M1 9-15)



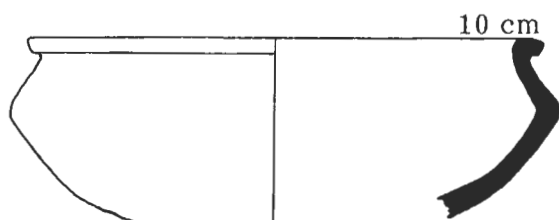
M1 16



M1 17



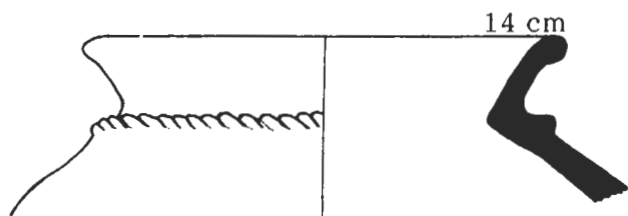
M1 18



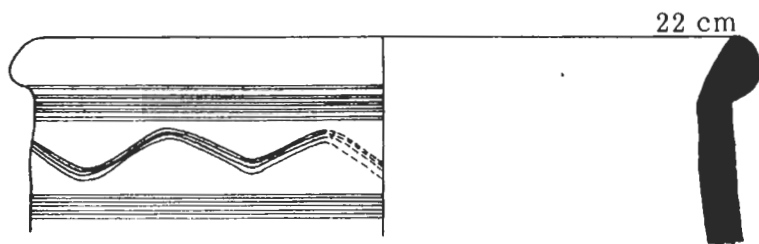
M1 19



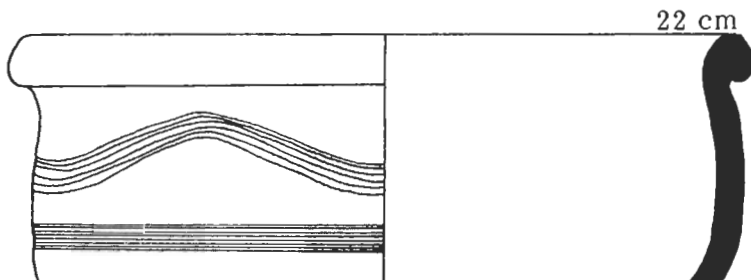
M1 20



M1 21



M1 22



M1 23

Figure 21. Ceramic types from the surface of the High Mound
Simple ware (M1 16, 18-19), Painted Simple ware (M1 17), late third mill. or "Ur III" (M1 21-23)

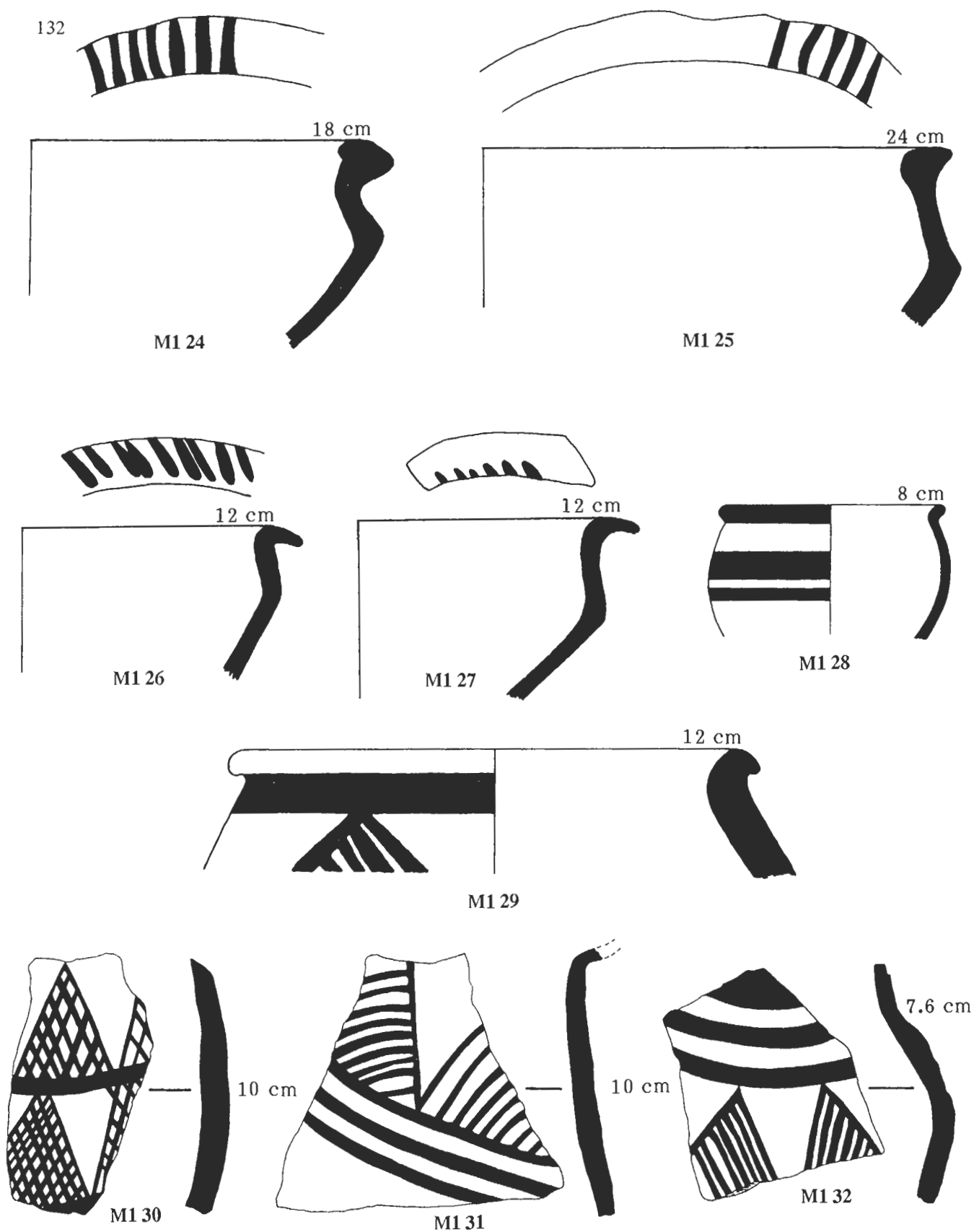


Figure 22. Ceramic types from the surface of the High Mound: Khabur ware

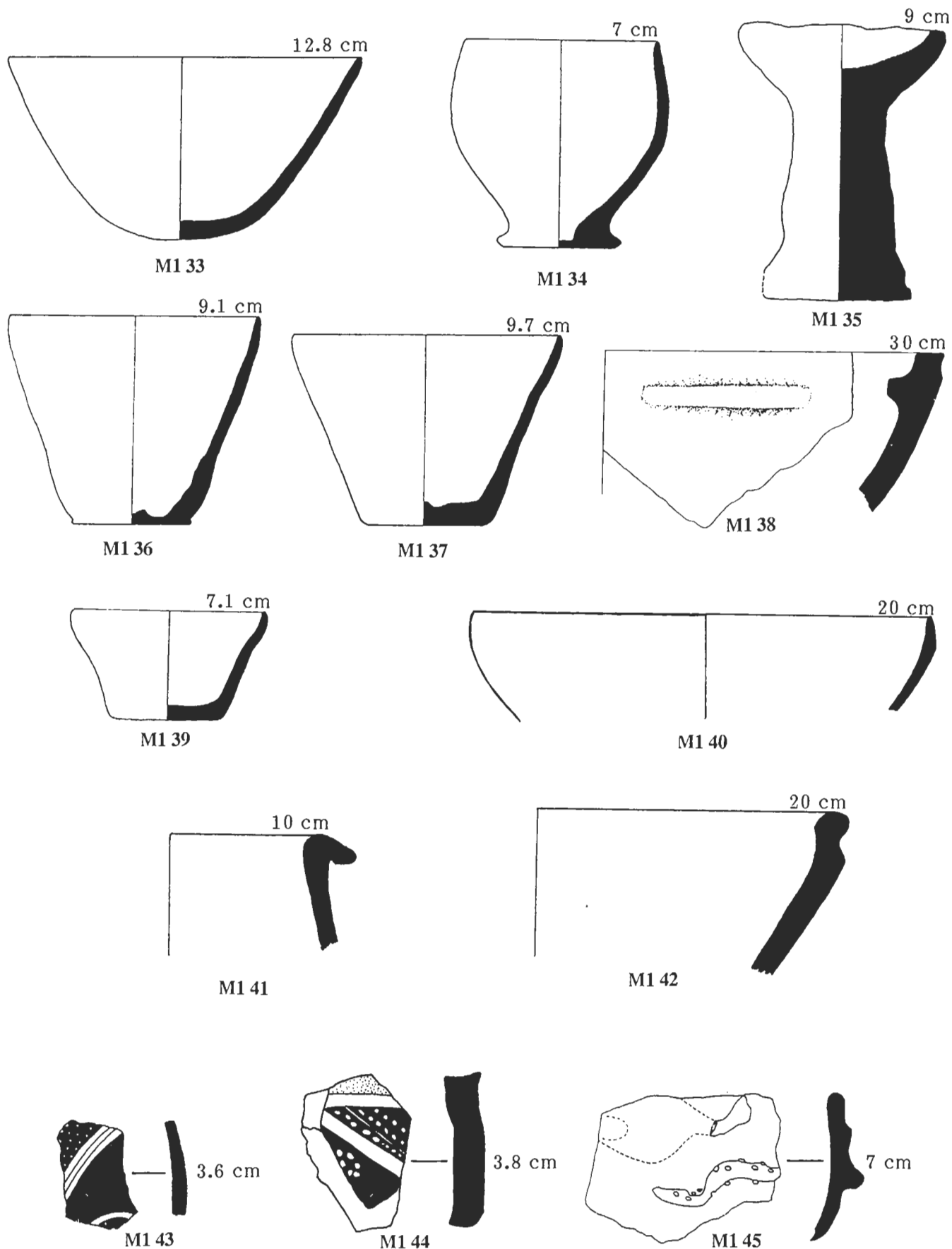


Figure 23. Ceramic types from the soundings and surface of the High Mound
 Miscellaneous types (M1 33-39 are from the soundings, M1 40-45 from the surface)

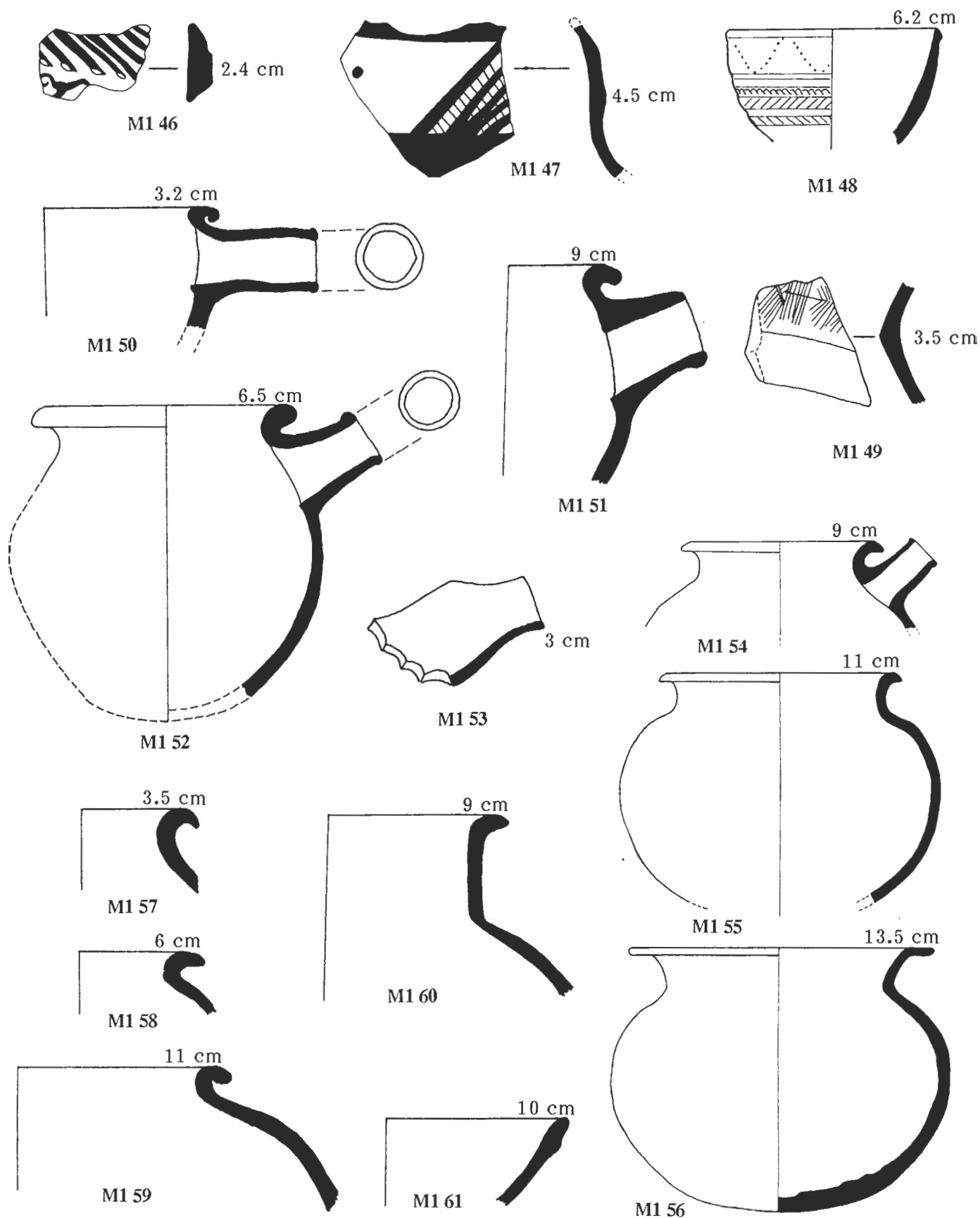


Figure 24. Ceramic types from the soundings
Halaf (M1 46-47), Incised Ninevite V (M1 48-49), Simple ware (M1 50-59), Metallic ware (M1 60-61)

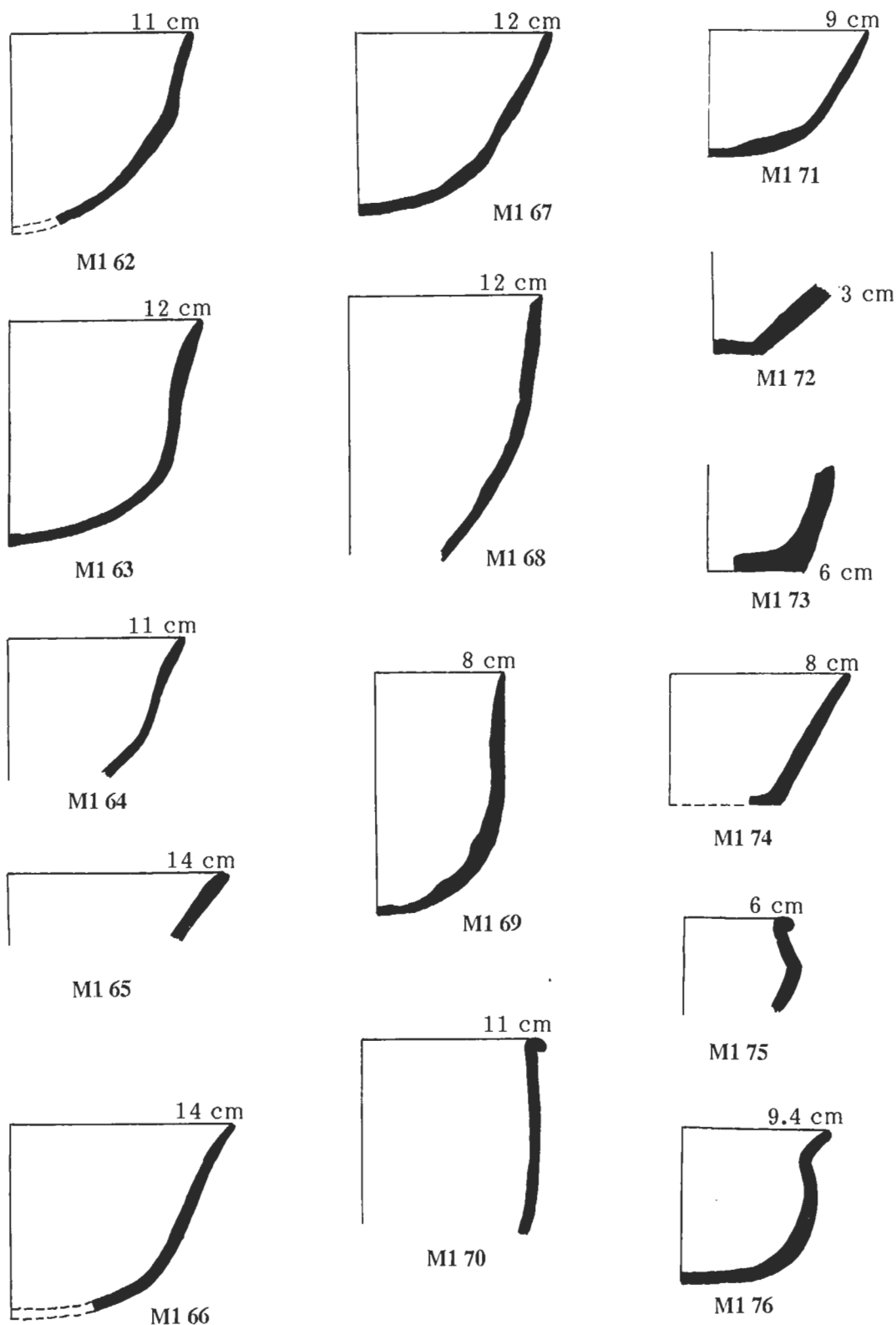


Figure 25. Ceramic types from the soundings
 Simple ware (M1 65, 72-73, 75-76 are from Area B1, the rest from area K1)

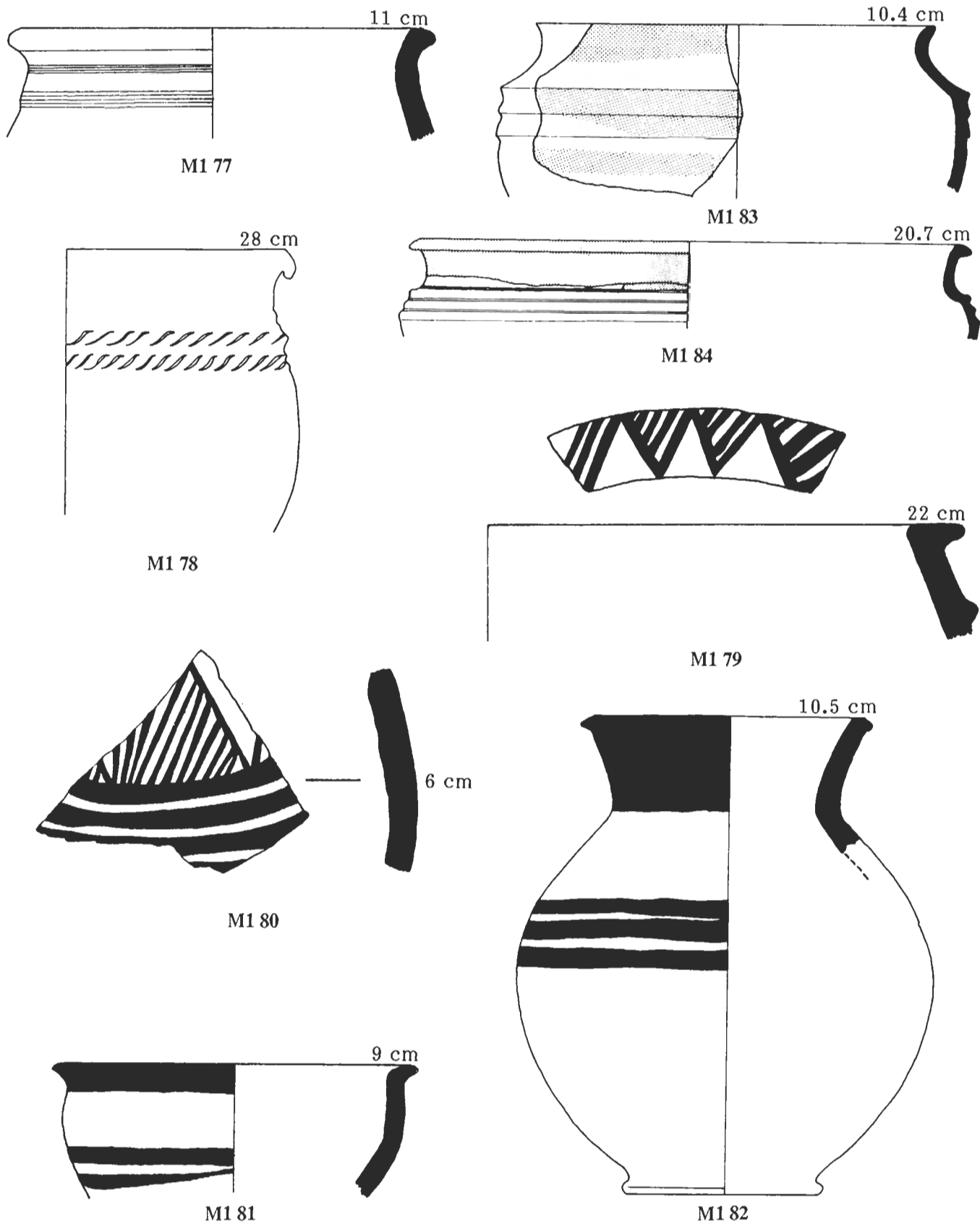


Figure 26. Ceramic types from the soundings
 Late third mill. or "Ur III" (M1 77-78), Transitional (M1 83-84), Khabur ware (M1 79-82)

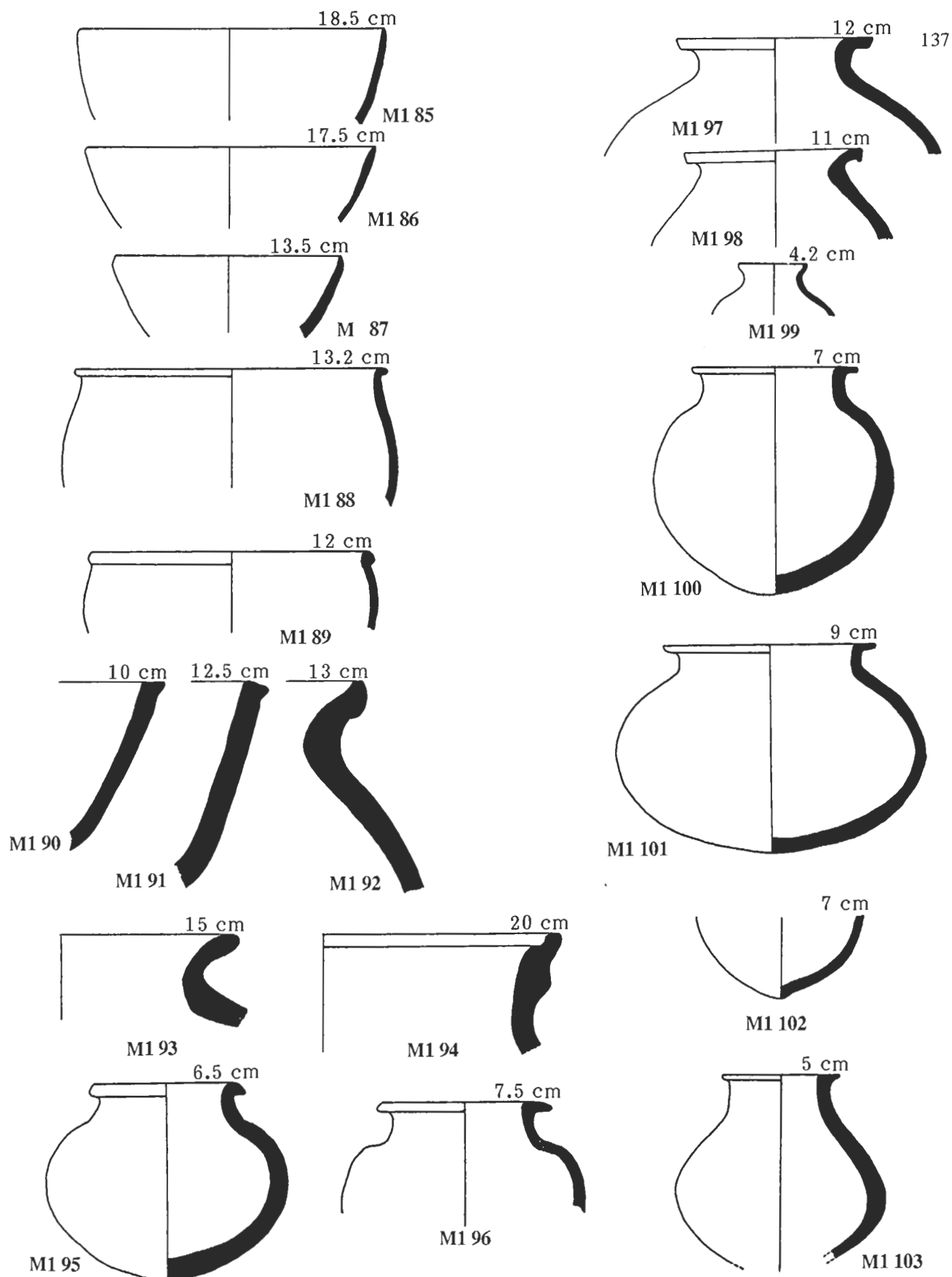


Figure 27. Ceramic types from the surface of the Outer City: Location Os4

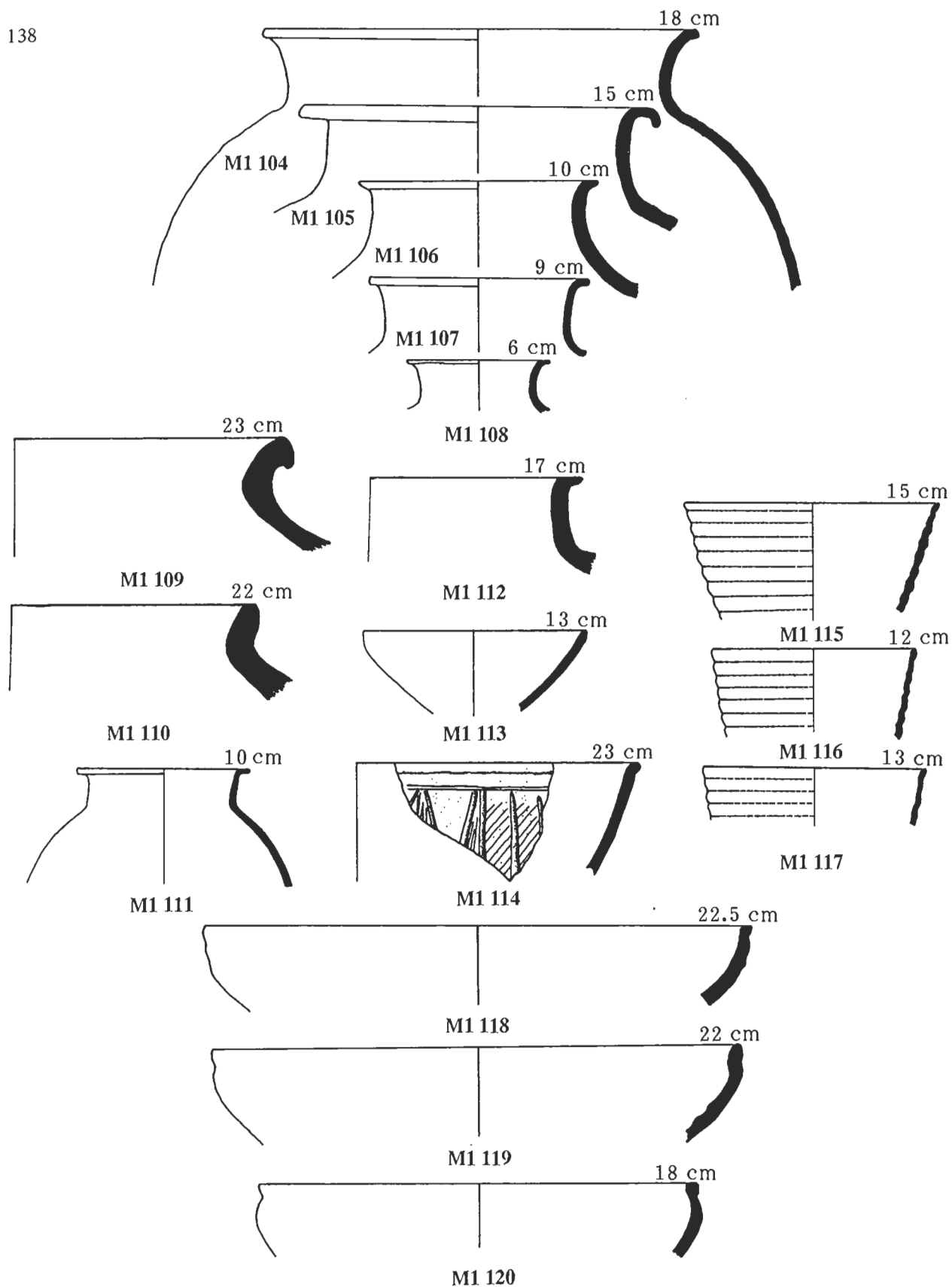


Figure 28. Ceramic types from the surface of the Outer City: Location Os6

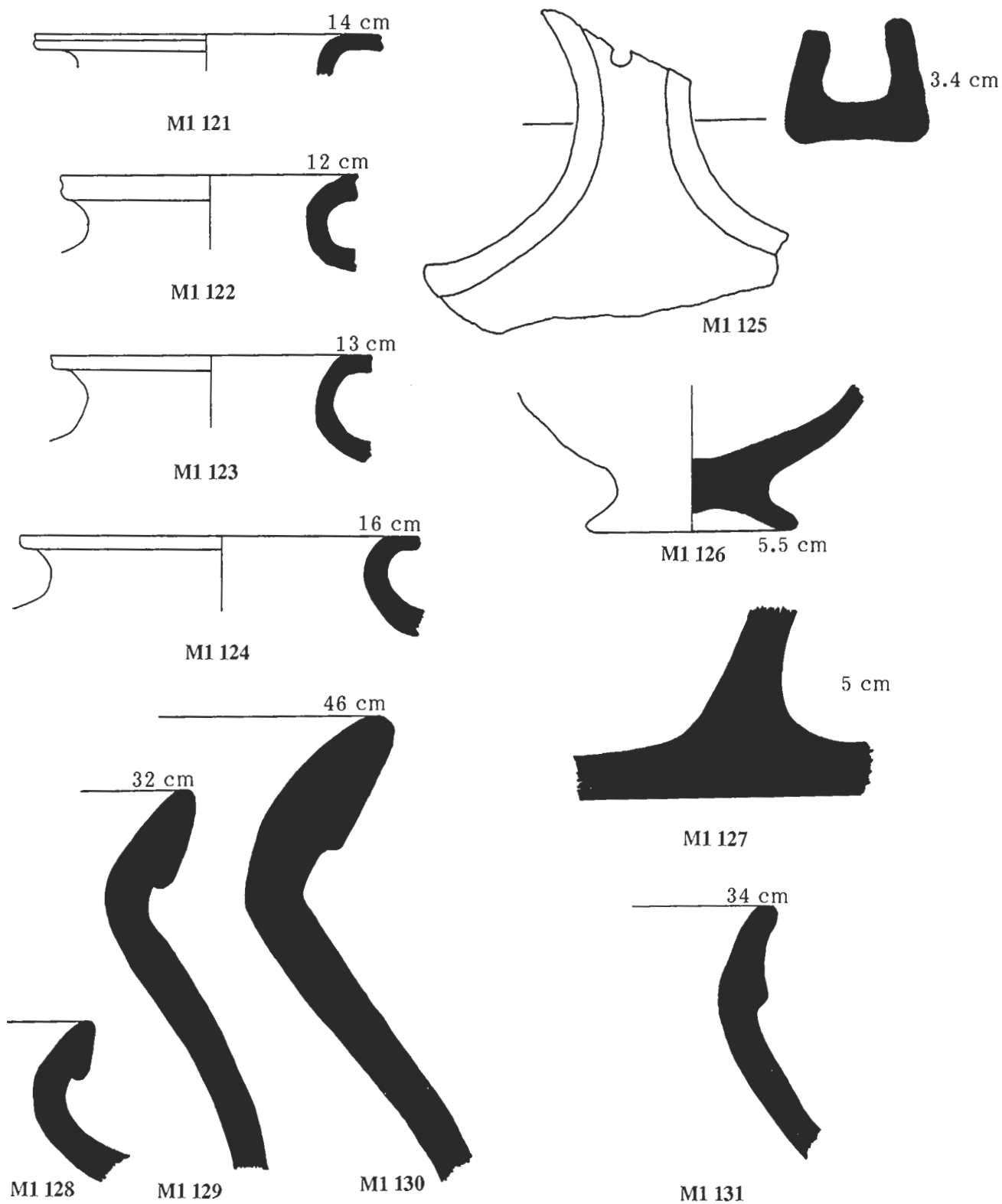


Figure 29. Ceramic types from the surface of the Outer City: Locations Os7 and Os9

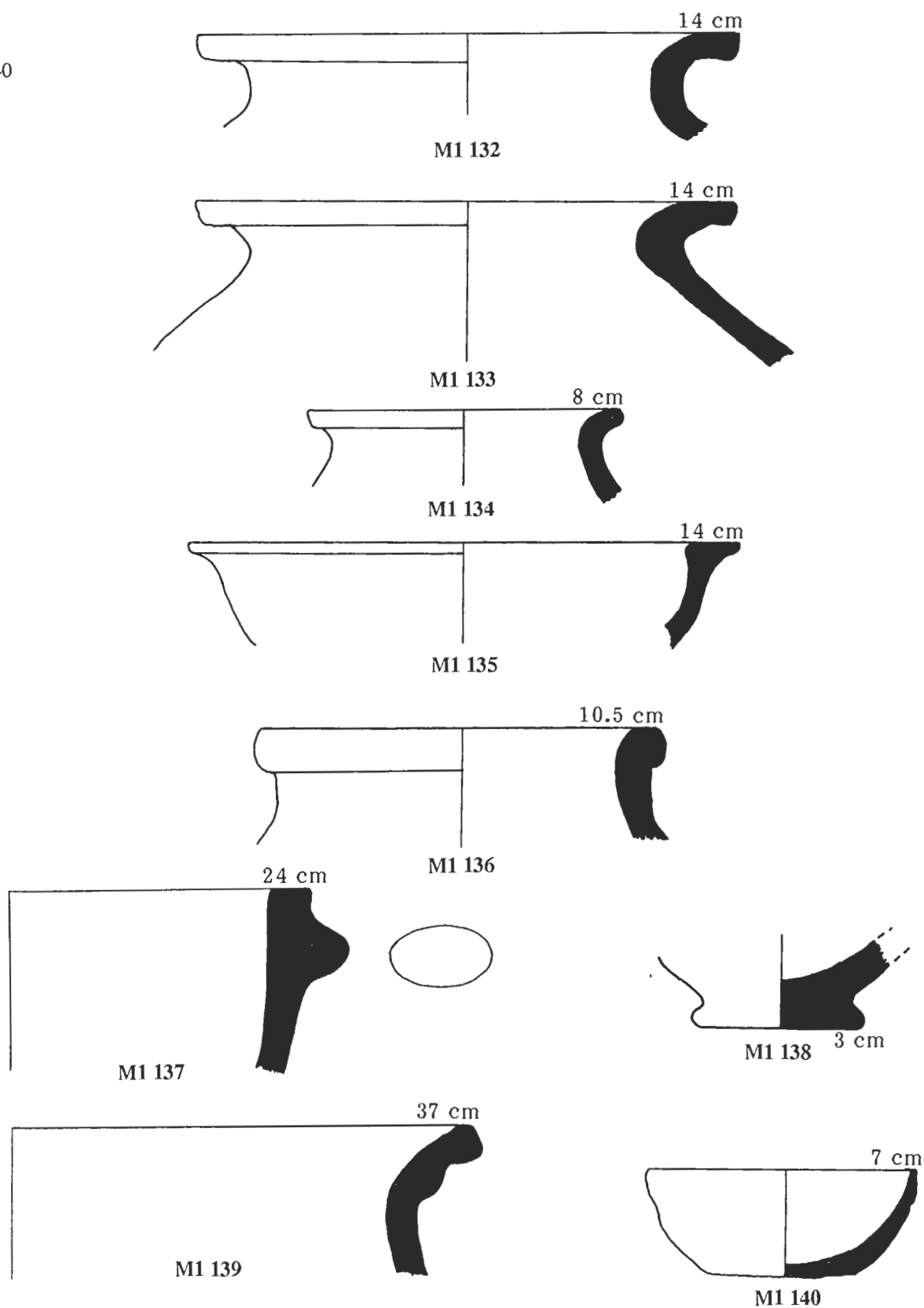


Figure 30. Ceramic types from the surface of the Outer City: Metallic and Simple ware types from various locations

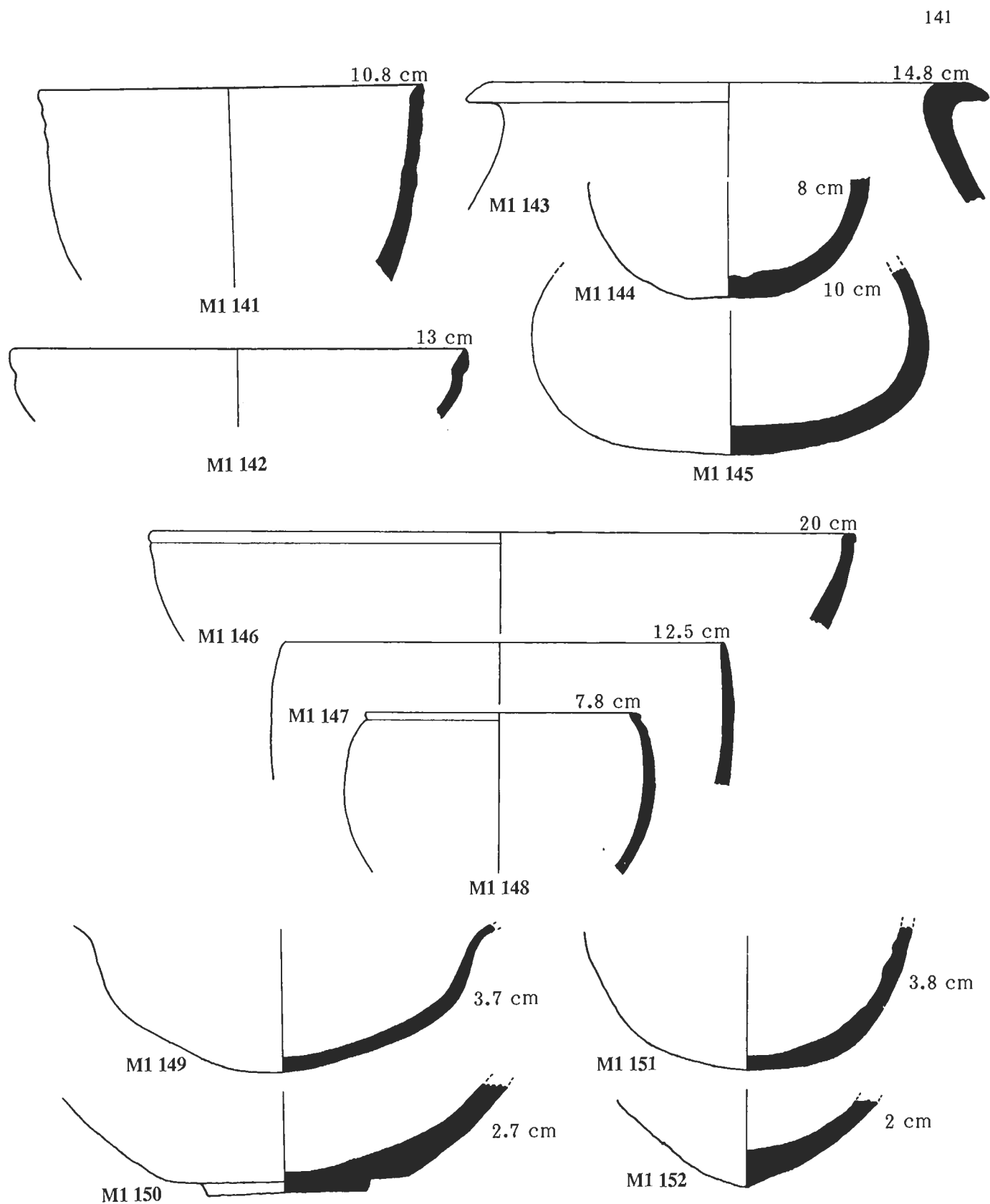


Figure 31. Ceramic types from the surface of the Outer City: Miscellaneous types

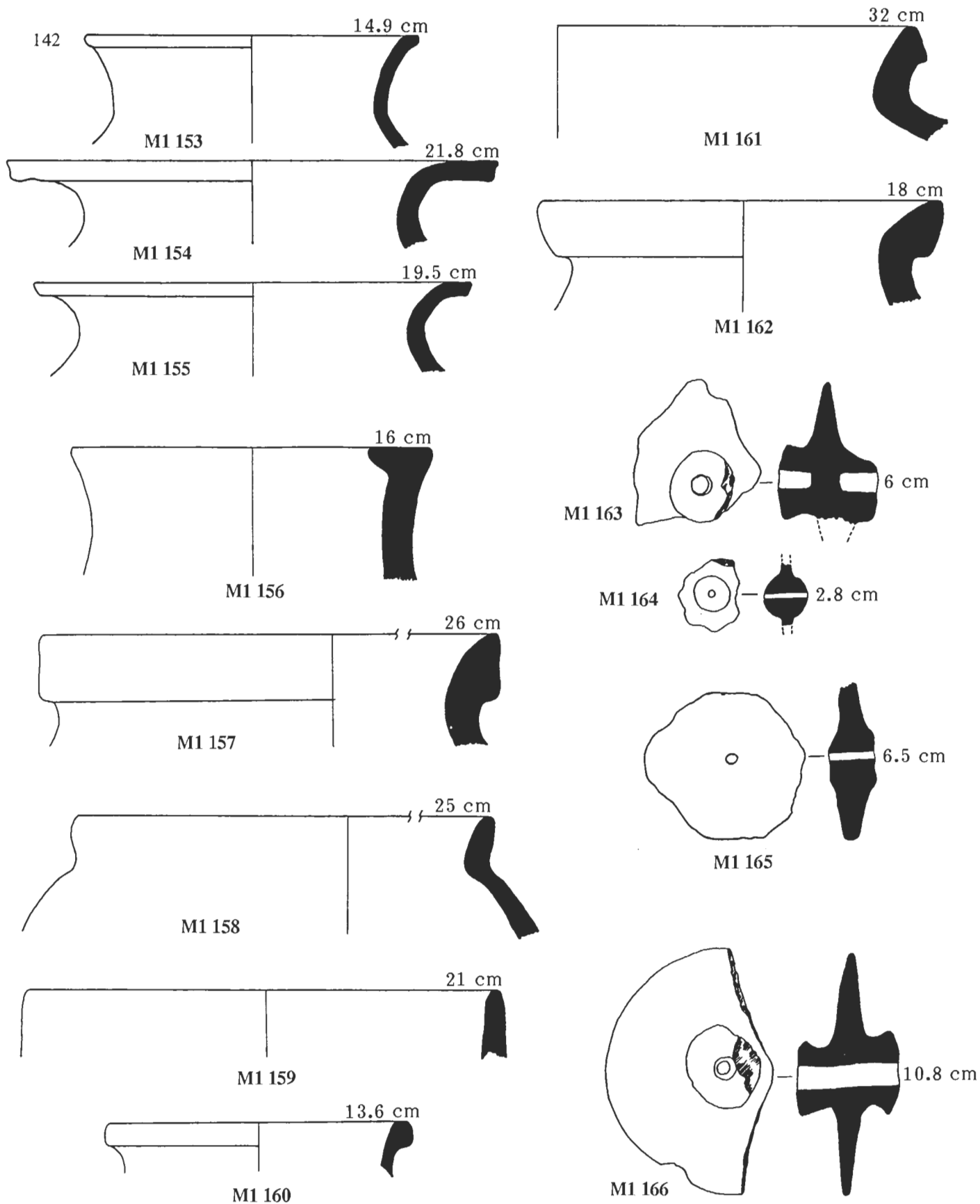


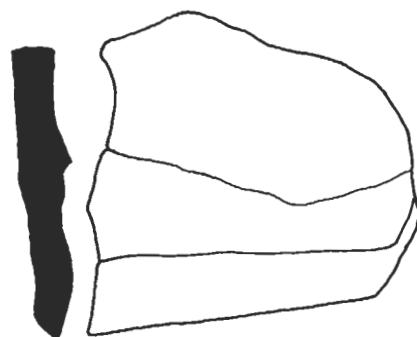
Figure 32. Ceramic types and wheels from the surface of the Outer City



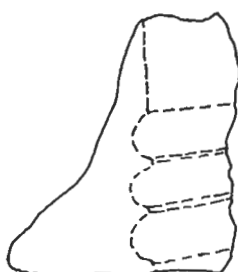
M1 168



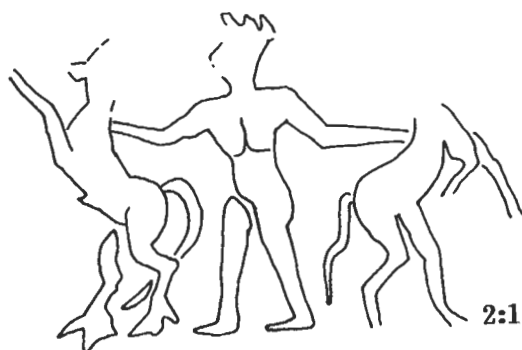
M1 167



1:1



M1 169



2:1

Figure 33. Seal impressions from the glaci in Area K

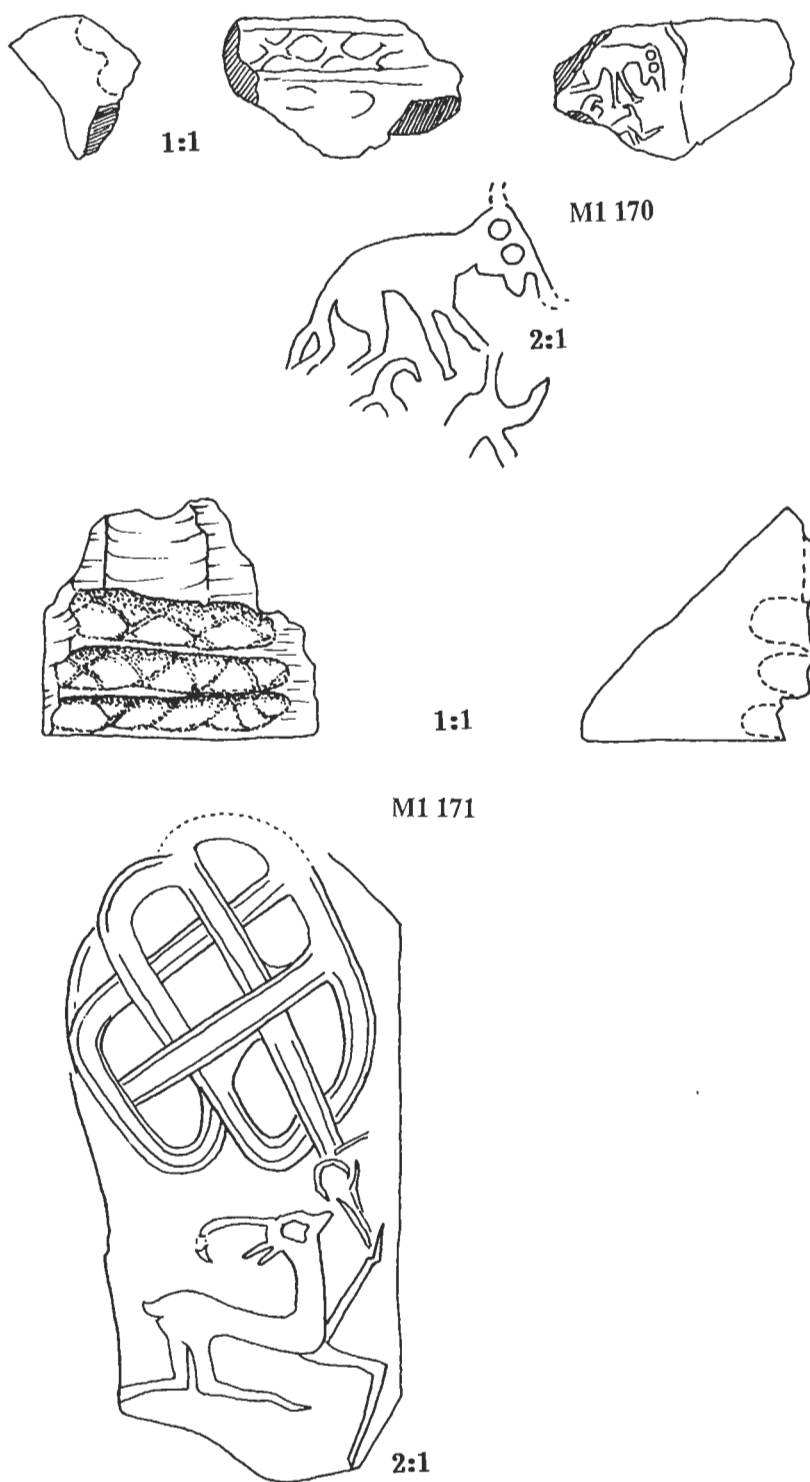
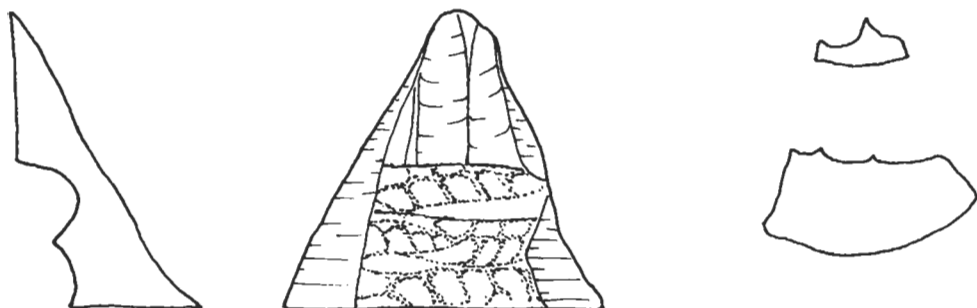
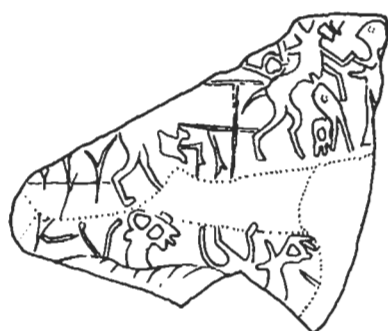


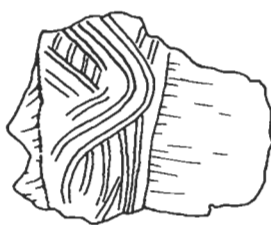
Figure 34. Seal impressions from the glaciis in Area K



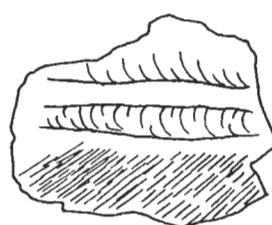
M1 172



1:1

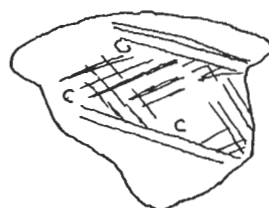
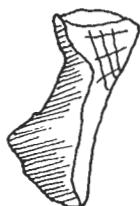
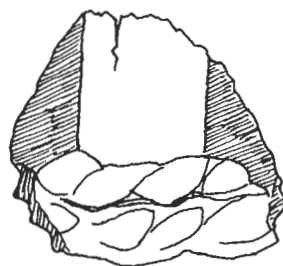
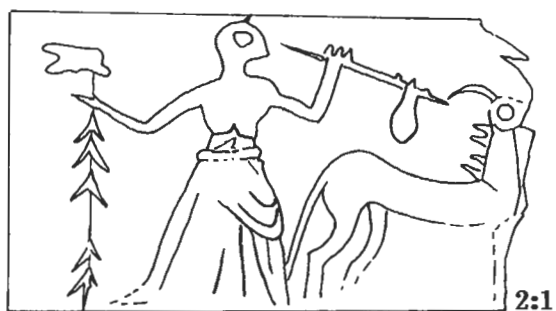
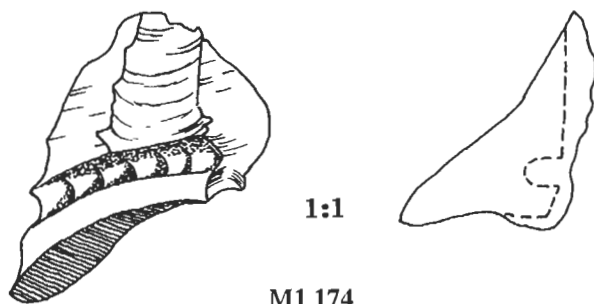


M1 173



1:1

Figure 35. Seal impressions from the glacis in Area K



M1 176

Figure 36. Seal impressions from the glaciis in Area K

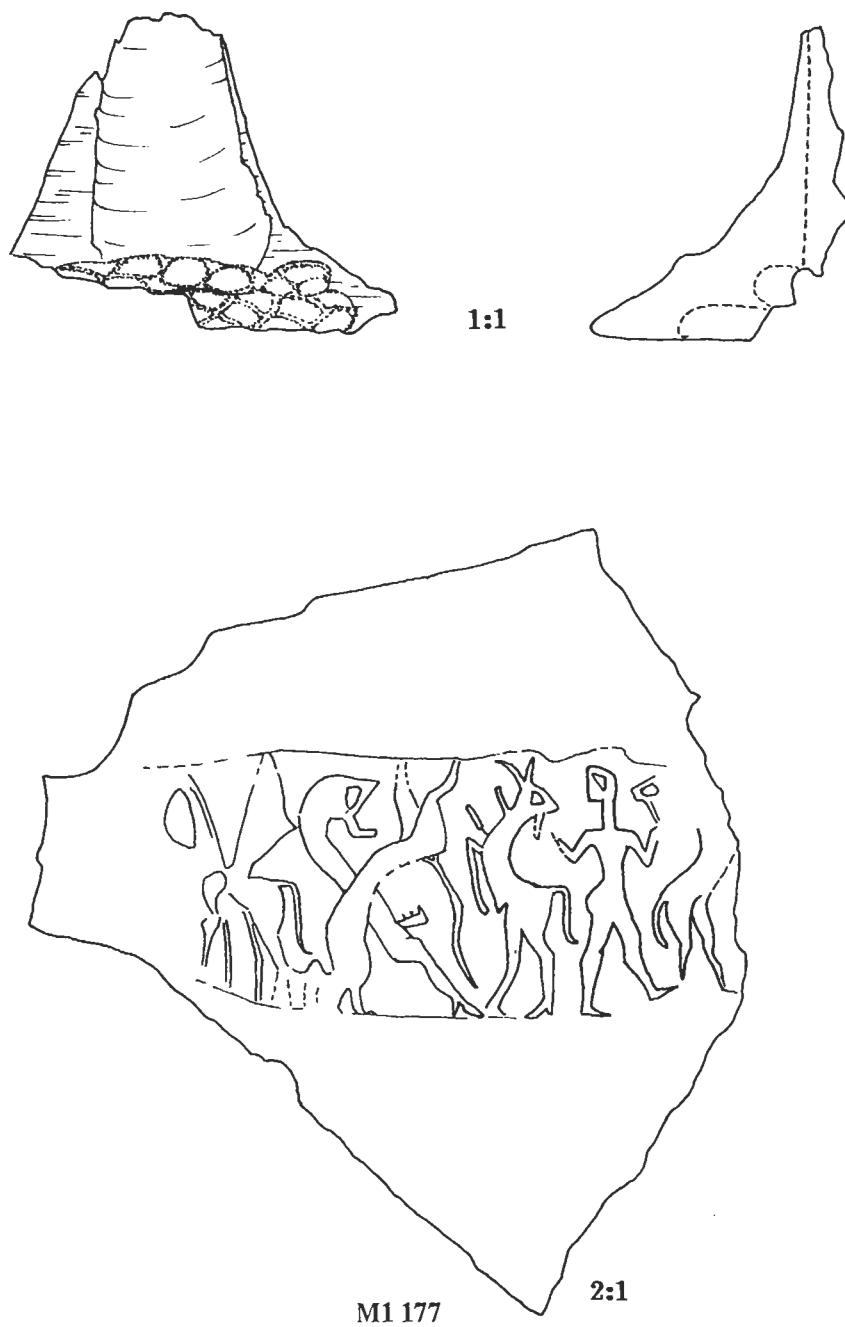
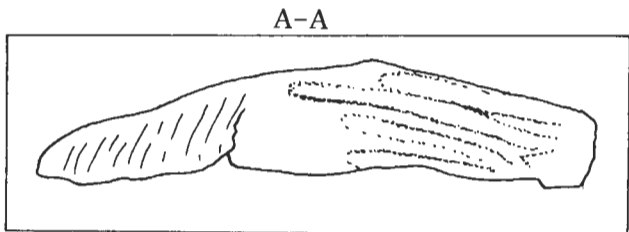
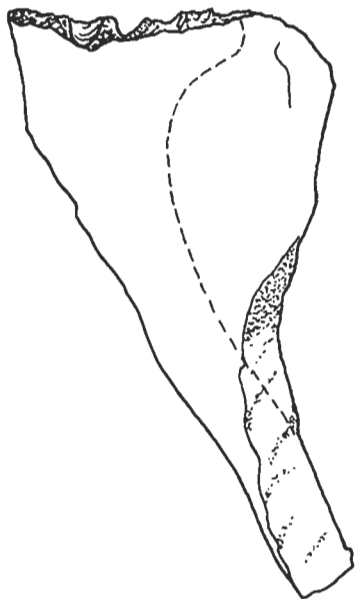


Figure 37. Seal impressions from the glaciis in Area K



M1 178

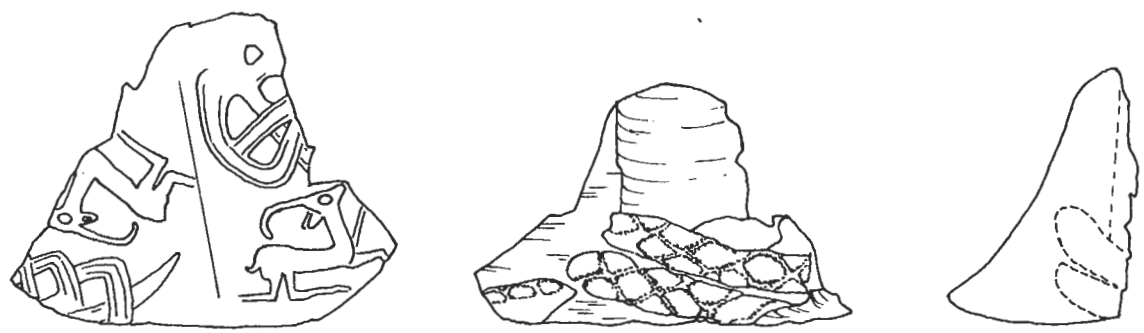


1:2

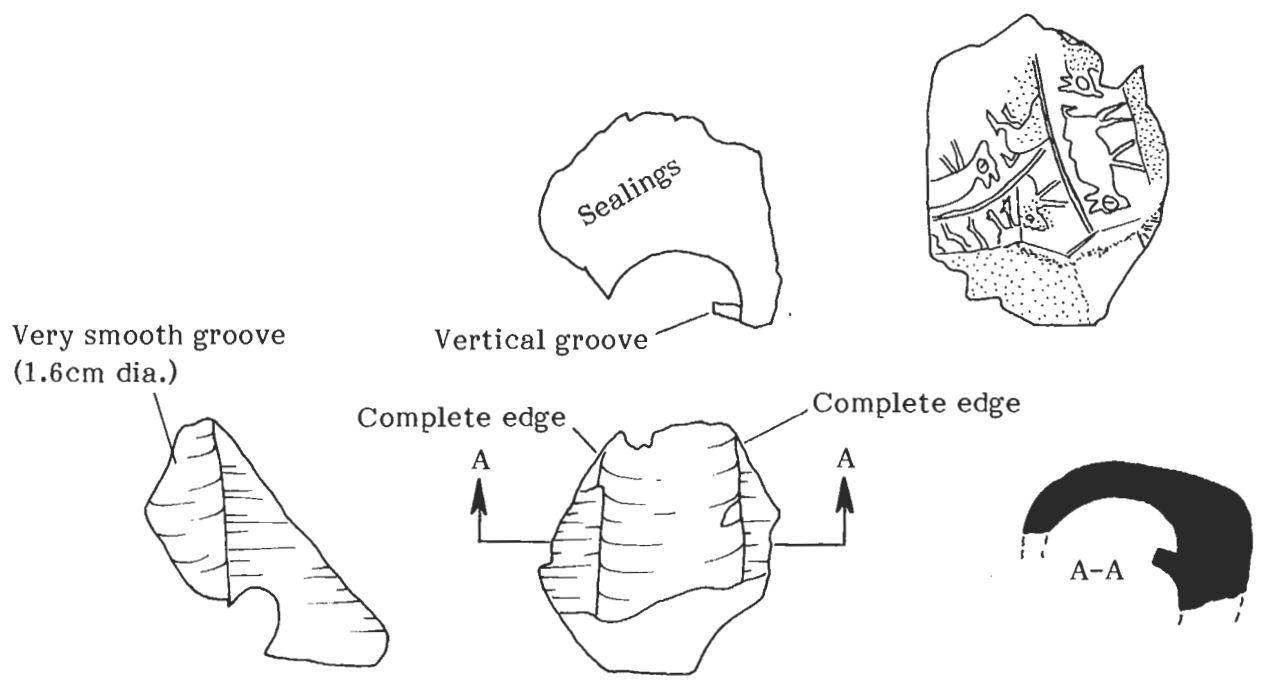


2:1

Figure 38. Seal impressions from the glacis in Area K



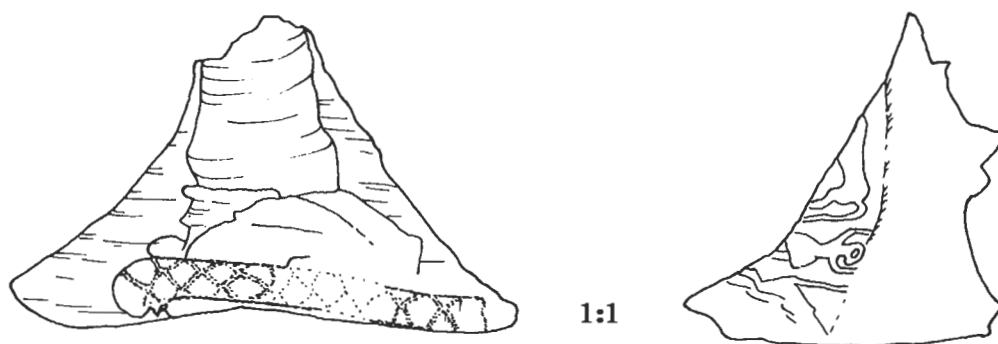
M1 179



M1 180

1:1

Figure 39. Seal impressions from the glacia in Area K



M1 181

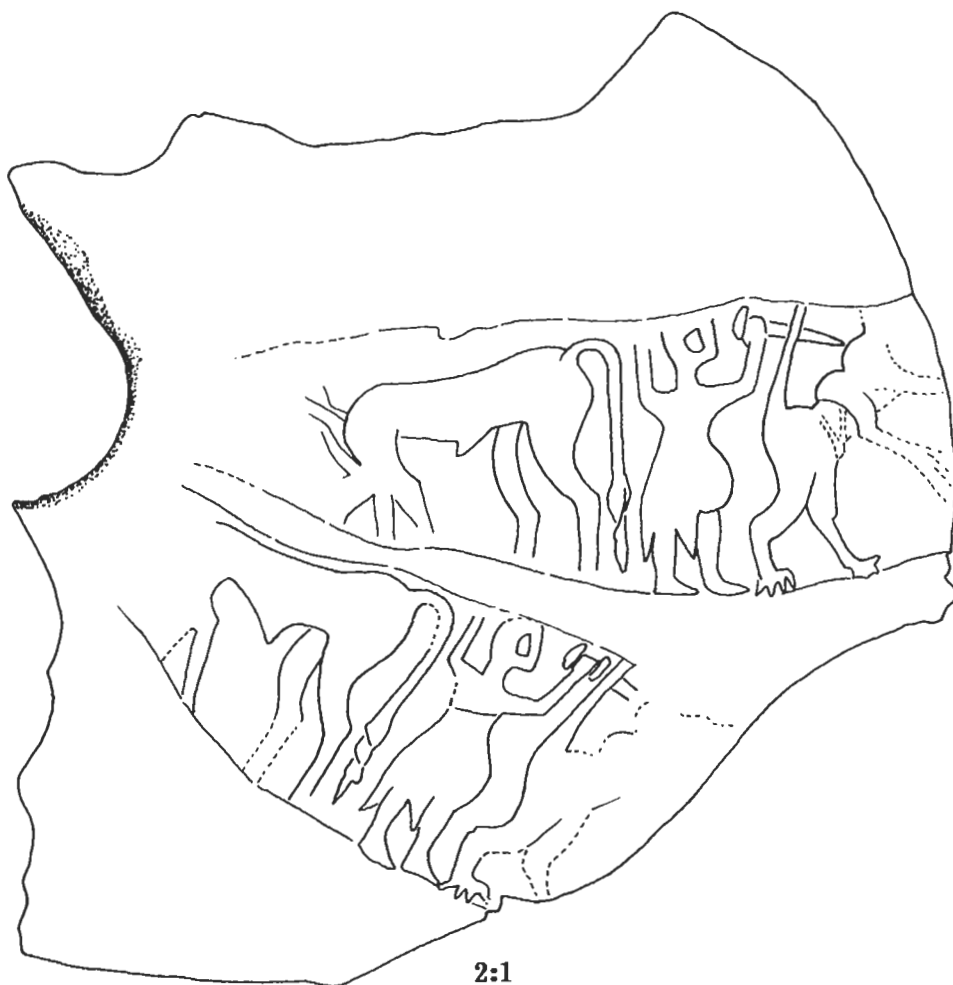


Figure 40. Seal impressions from the glaciis in Area K

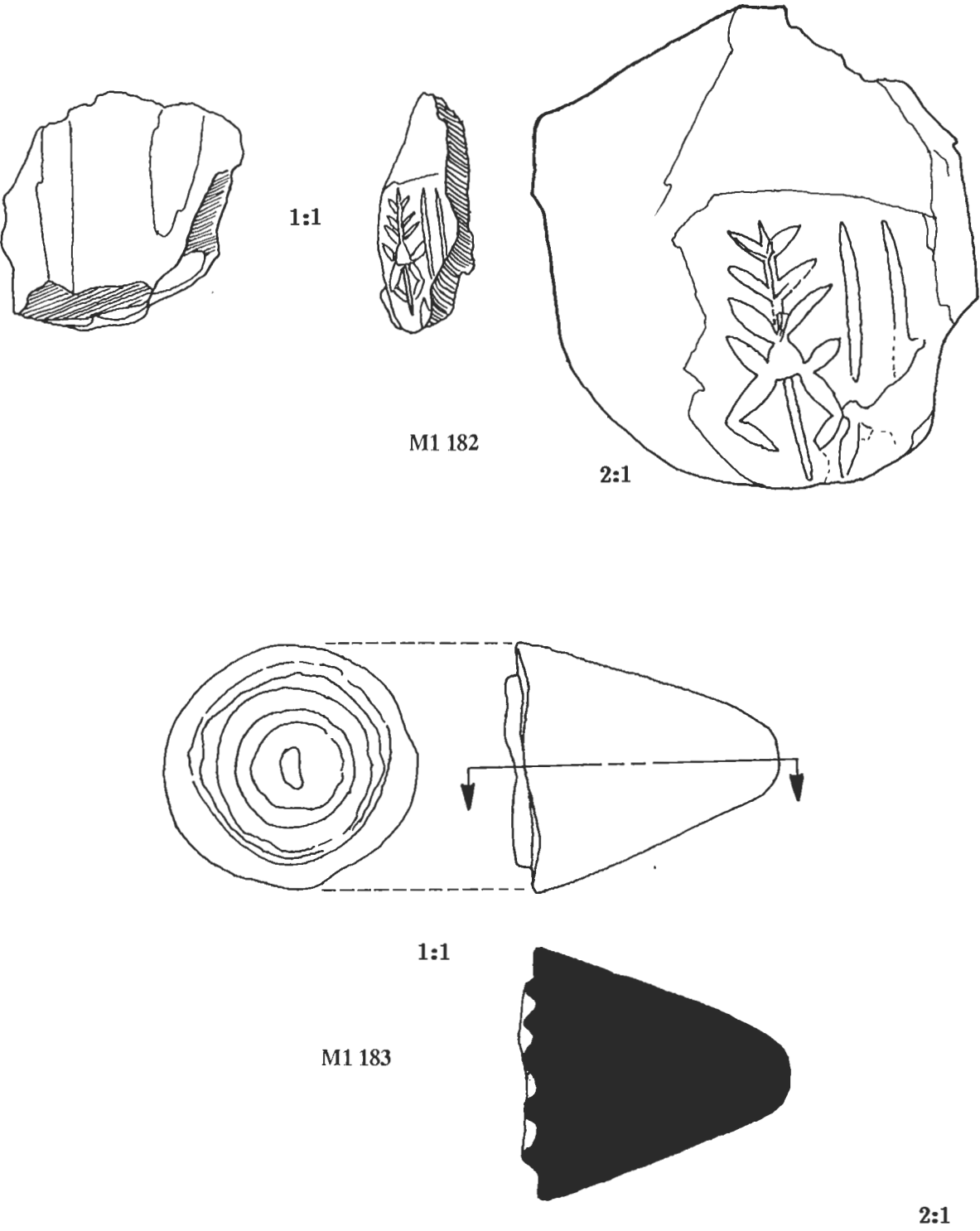


Figure 41. Seal impression and stamp seal from the surface

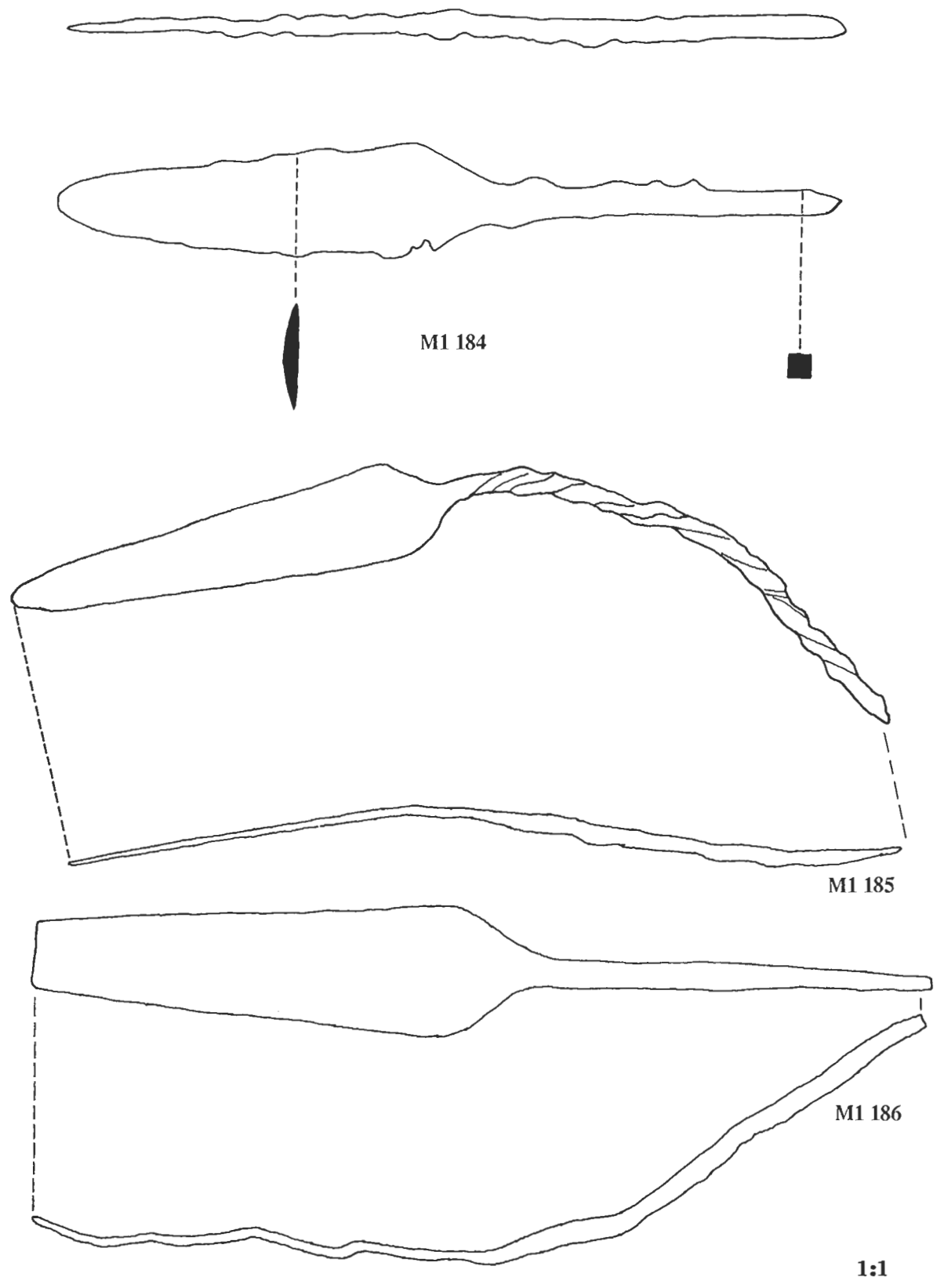
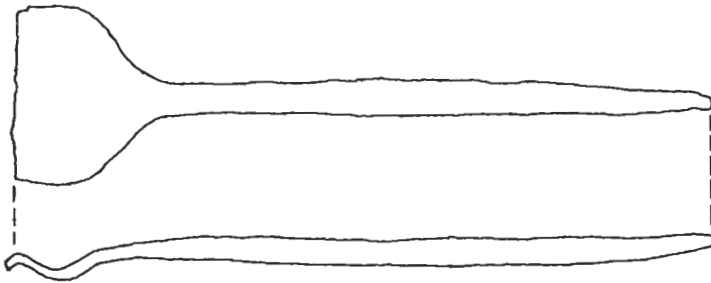


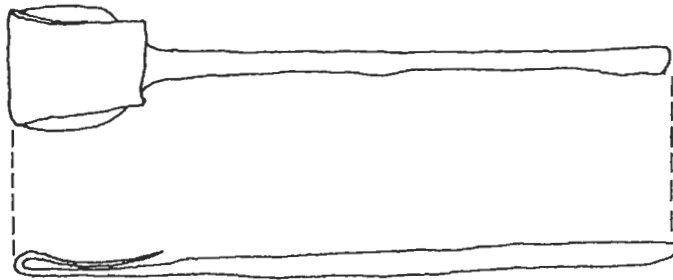
Figure 42. Metal spearheads



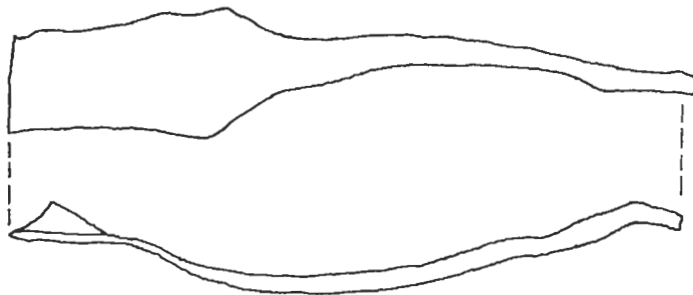
M1 187



M1 188



M1 189



M1 190

1:1

Figure 43. Metal spearheads

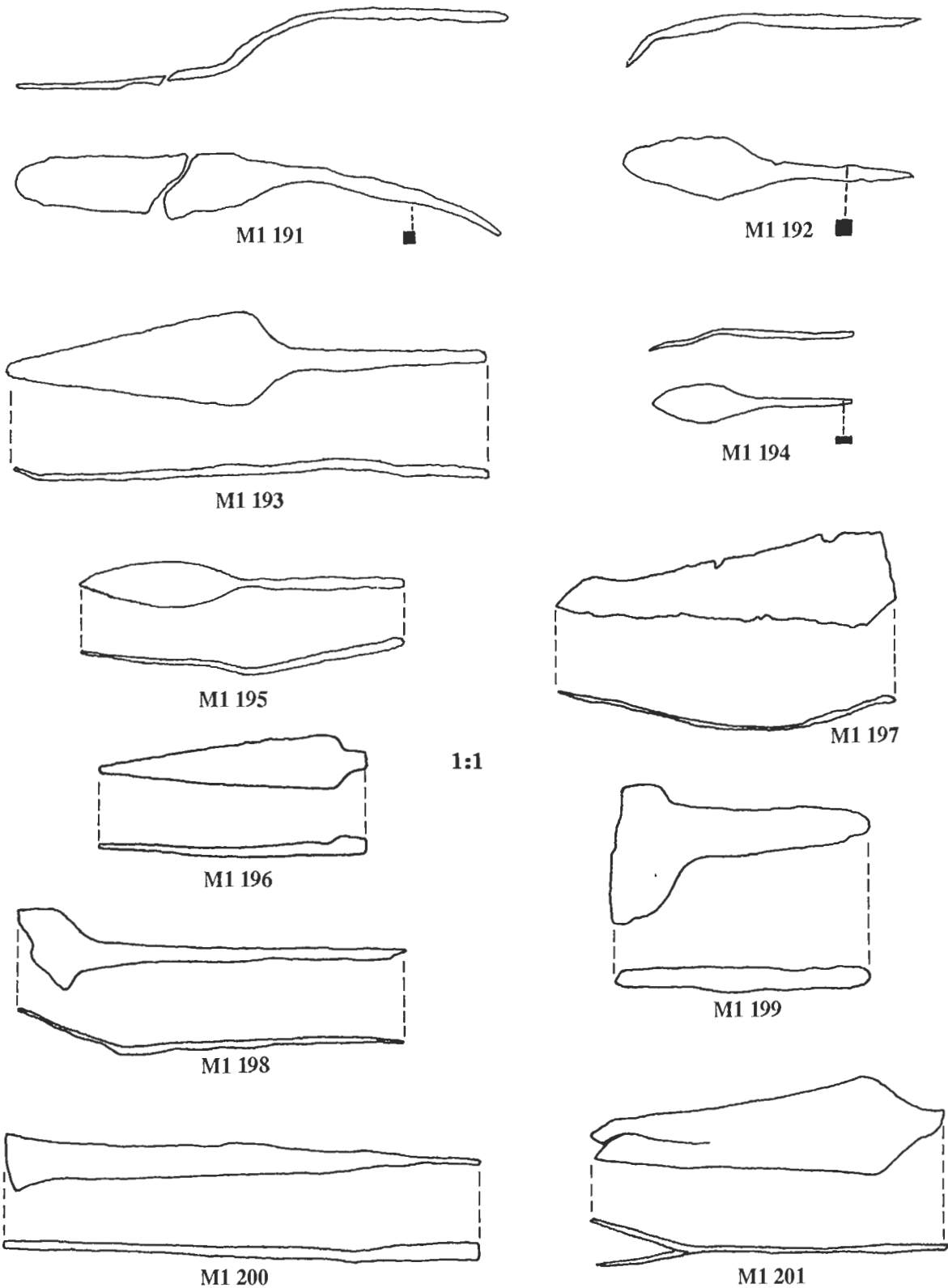
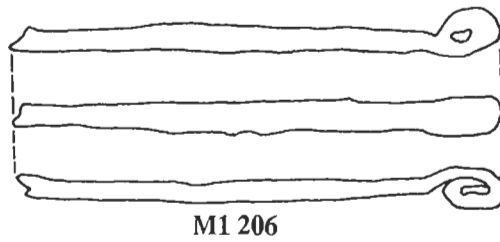
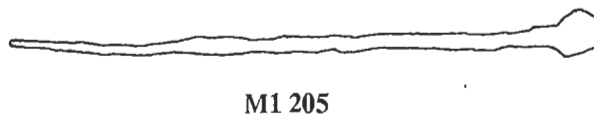
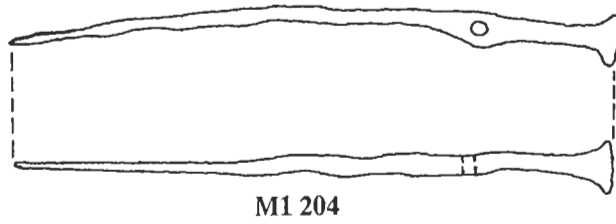
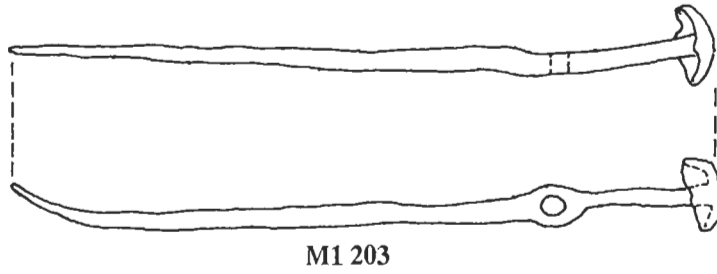
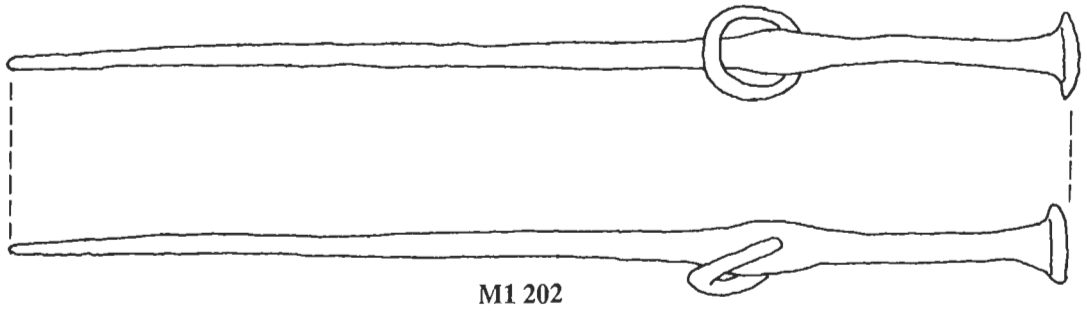


Figure 44. Metal points, spoons and scalpel



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Figure 45. Metal pins

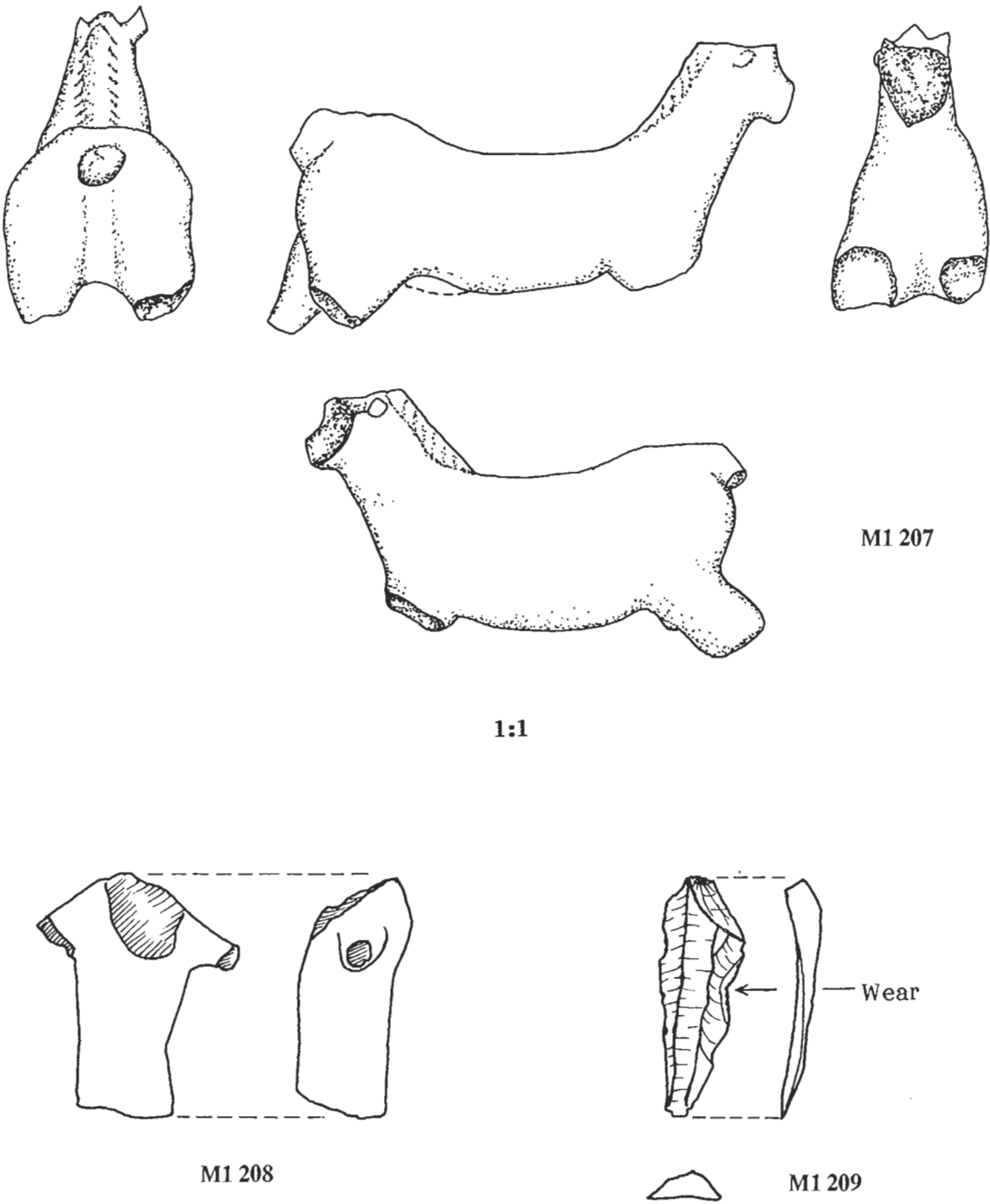


Figure 46. Lithic blade and figurines

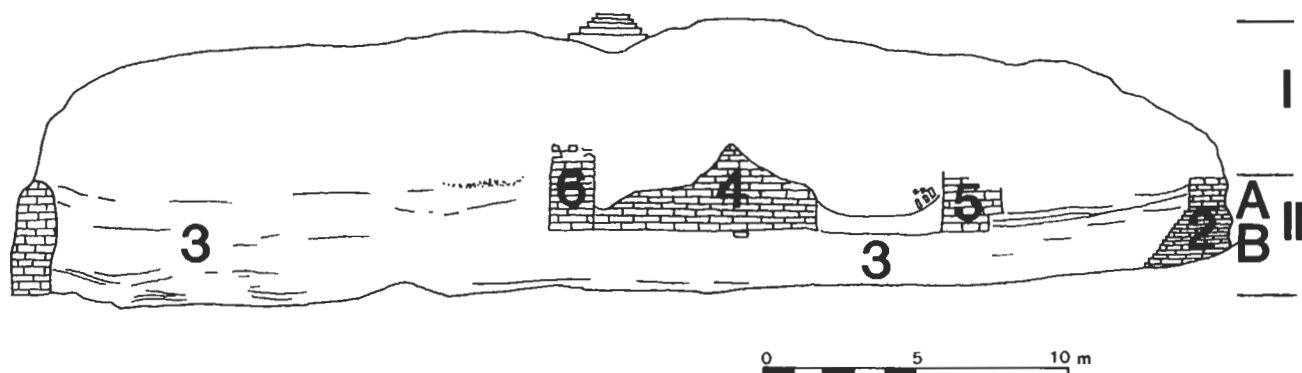


Figure 47. Tell Shermola: Sketch section of northern side of central mound

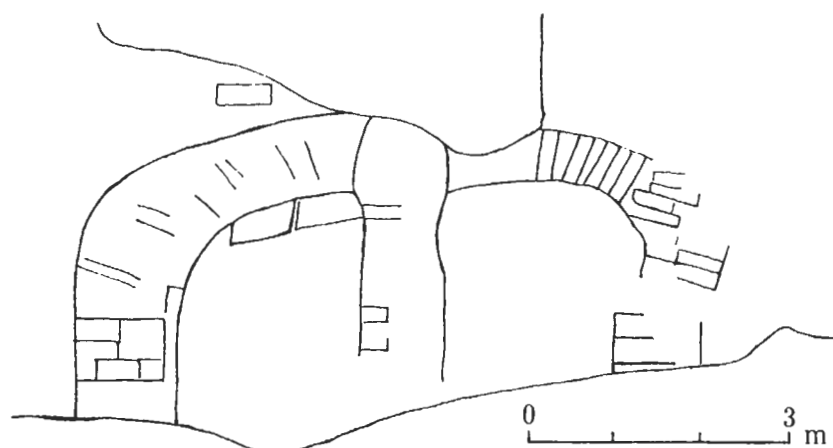


Figure 48. Tell Shermola: Sketch section of arched structure on southern side of mound

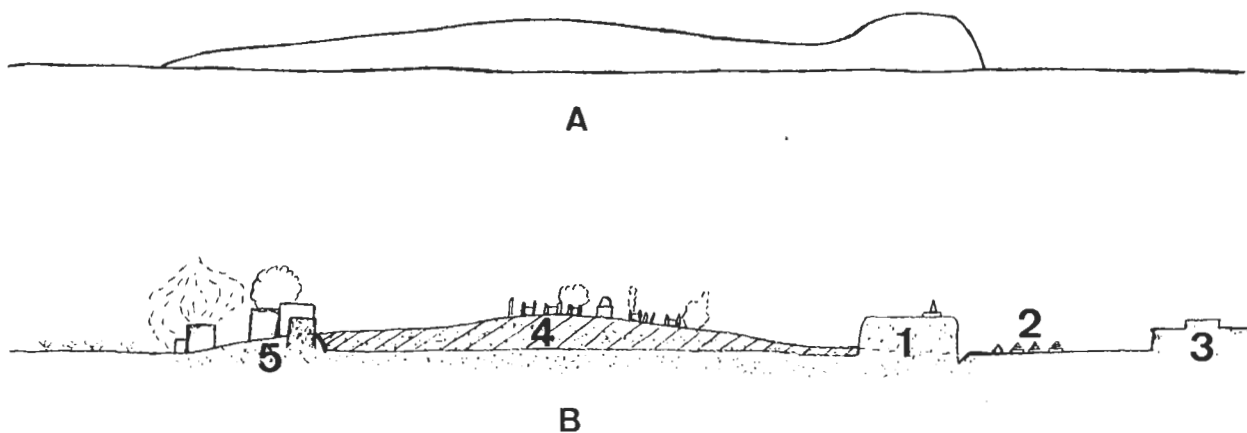


Figure 49. Tell Shermola: Sketch section of entire tell, looking west, with proposed reconstruction of ancient outline

- 1 Tell Shermola (main mound)
- 2 Cemetery
- 3 Southern edge of the town of Amuda
- 4 Cemetery hill
- 5 Southern mound

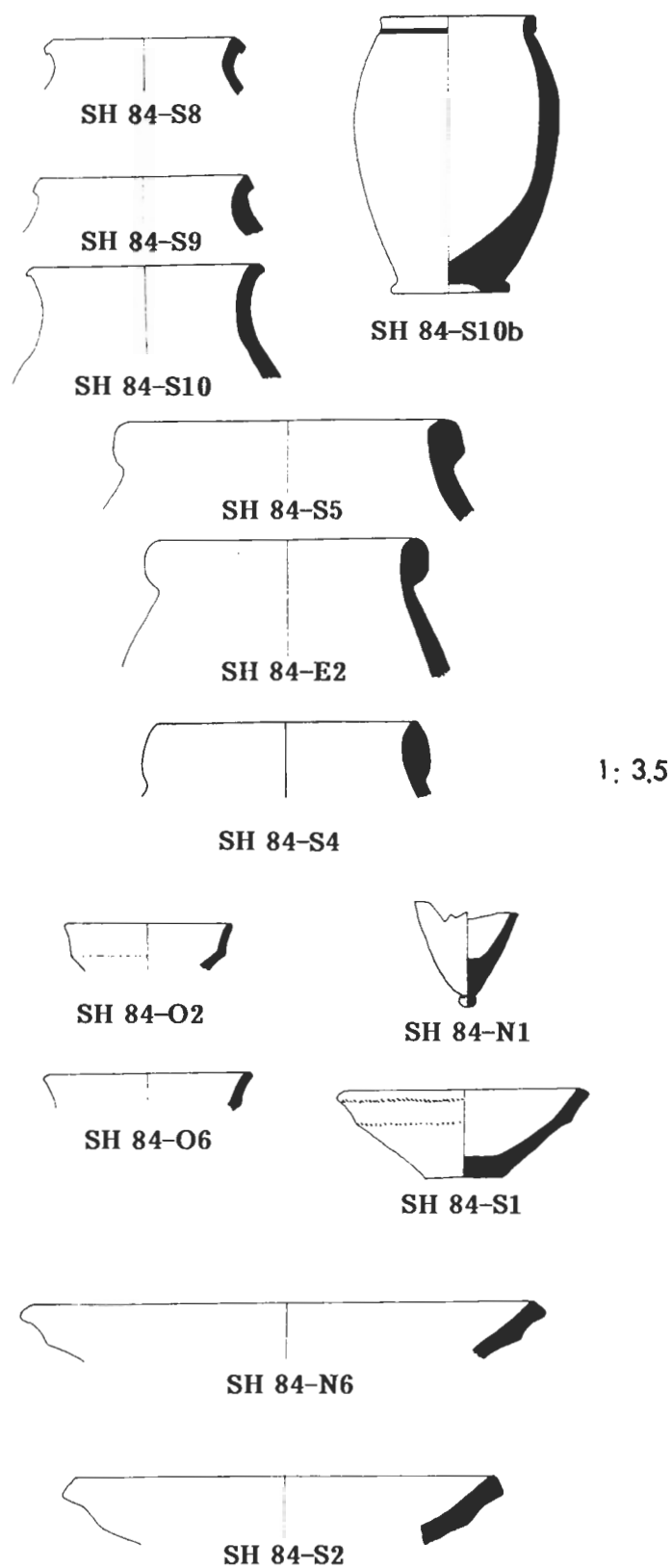


Figure 50. Tell Shermola: Ceramic types from the surface of the main mound

PLATES

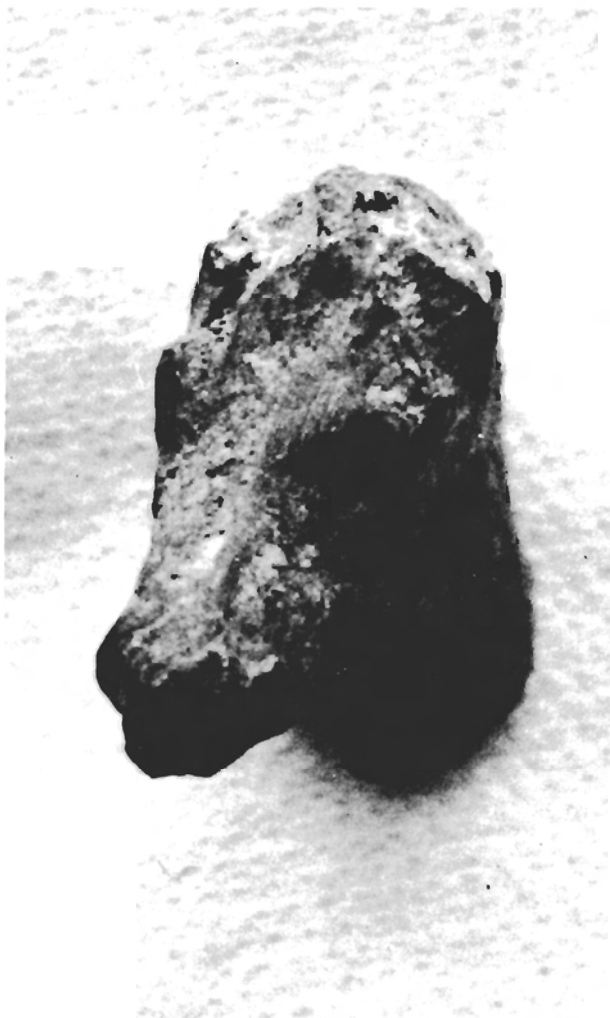


Illustration 1. Miniature head of a horse

M1 209 (K1.12). Burnt clay; from the destruction layer in K1 feature 16 (mid third millennium).

PLATE II



Illustration 2. Aerial view of Tell Mozan with Outer City (far shot, looking southwest).

A faint discoloration (and in some cases a change in the pattern of field layout) marks the low rise which encircles the Outer City. The distance between the southern and northern points (S and N in the photograph) is about one mile.

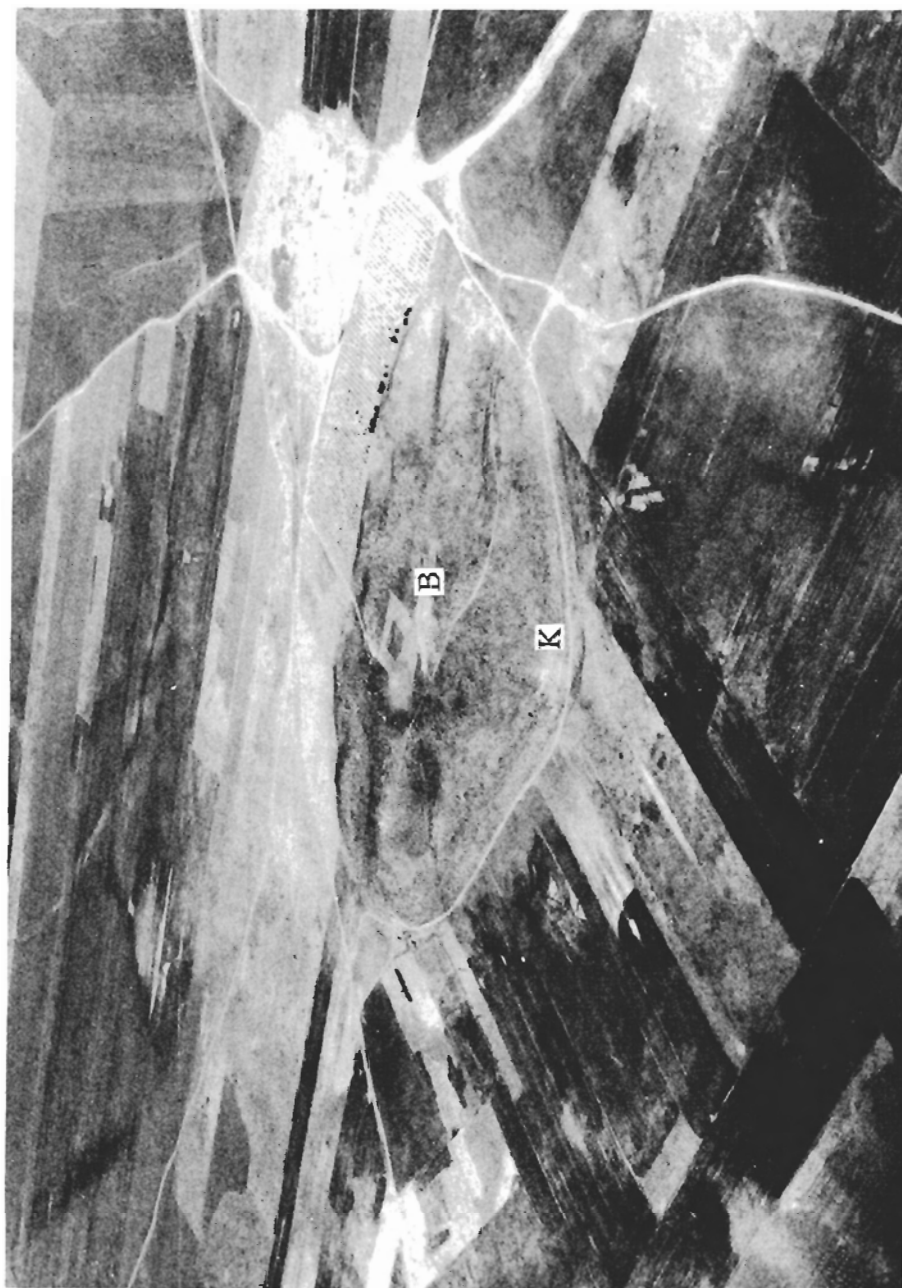


Illustration 3. Aerial view of Tell Mozan with Outer City (medium shot, looking west).

B and K are the two main soundings of the first two seasons.

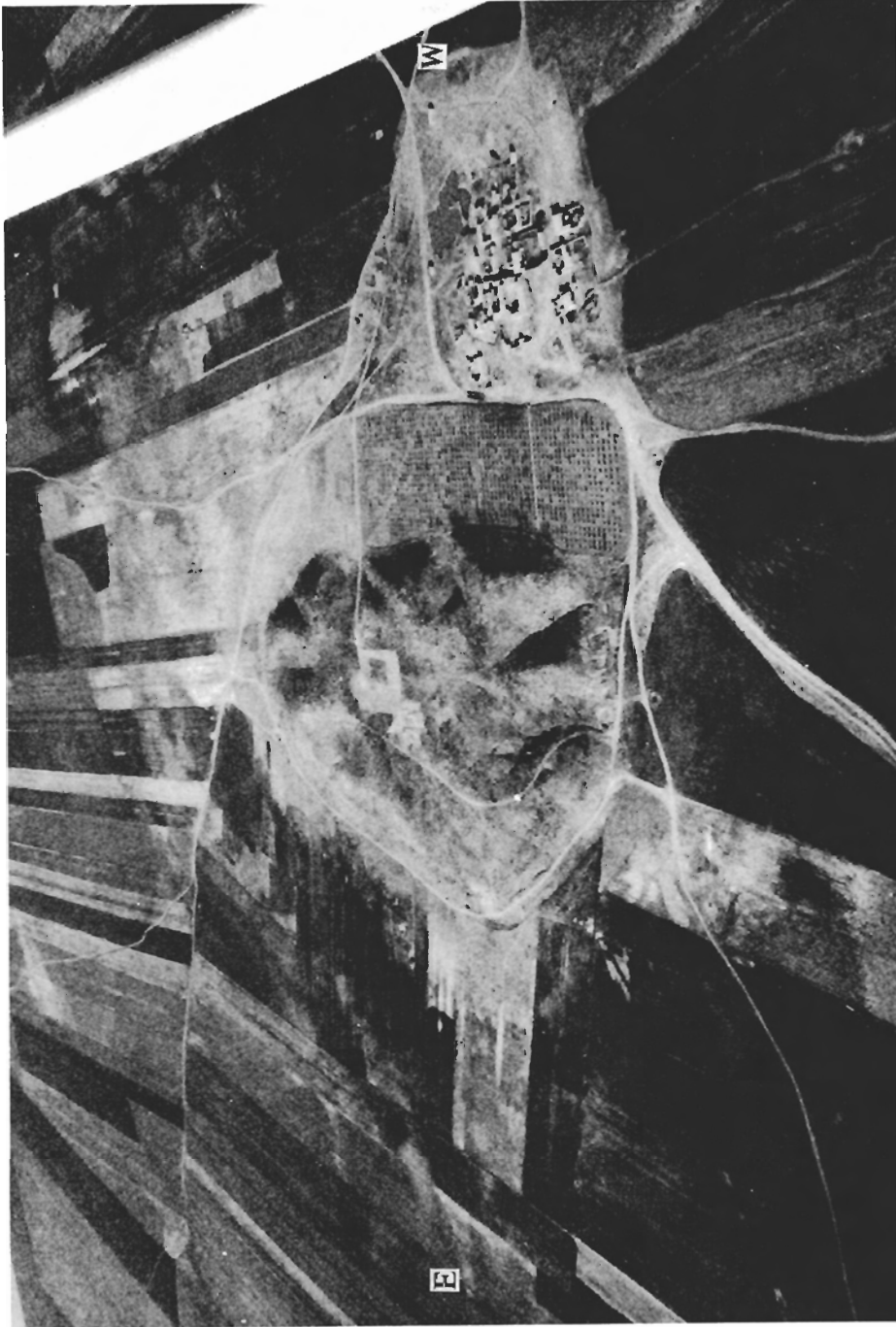


Illustration 4. Aerial view of Tell Mozan (narrow shot, looking south).

The village of Mozan is visible on the right; it is located within the area of the ancient Outer City. The vineyard between the village and the mound is on a gentle slope which may correspond to part of the ancient High Mound. The low rise encircling the Outer City is partly visible in the upper right. The distance between the eastern and western points (E and W in the photograph) is about one kilometer.

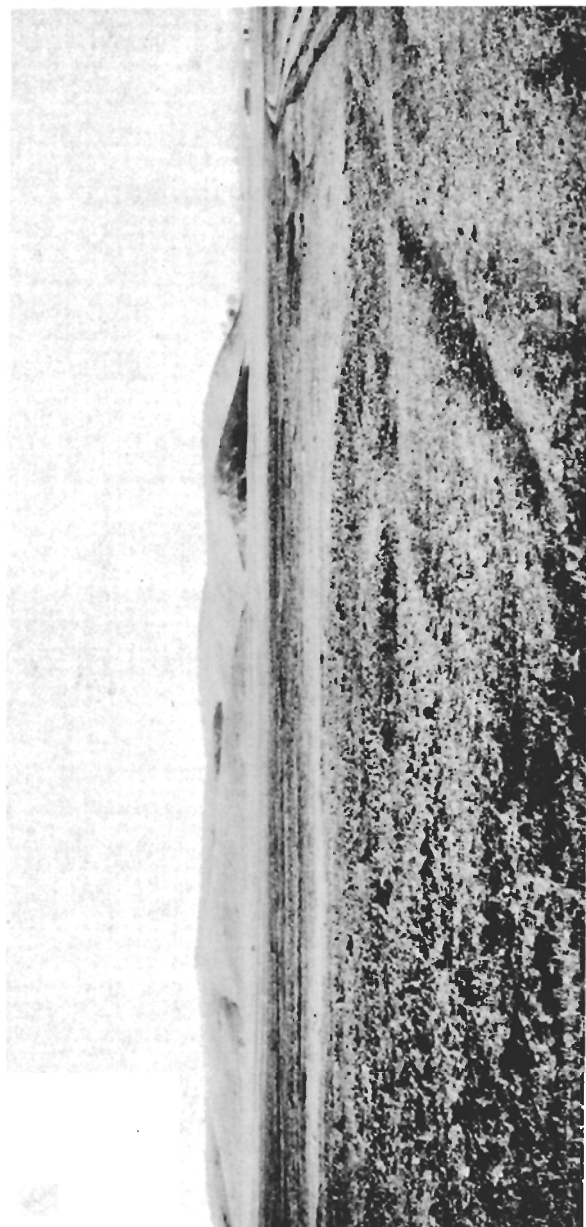


Illustration 5. Profile of Tell Mozan (looking south).

The village of Mozan is visible on the right. The trees on the slope delimit the higher border of the vineyard.

PLATE VI



Illustration 6. Stone building, Area B1 (direct overhead).

Stone ramp partly exposed, semi-circular feature, and southwest corner of outer stone wall. (The photograph was taken toward the beginning of the second season, and the exposure is correspondingly more limited than shown on the floor plan, Figure 8.)



Illustration 7. Stone building, Area B1 (oblique overhead, looking north).

The ramp and semi-circular structure are visible on the lower left, and beyond them the three parallel stone walls on the west. In the background is the continuation of this building with its stone foundations and the lower courses of mud brick walls.



Illustration 8. Stone building, Area B1: southwestern corner (oblique overhead, looking east).
Closer view of ramp, semi-circular structure, and southwestern portion of room.



Illustration 9. Stone building, Area B1: southwestern corner (looking south).
Visible in the center is the clear alignment of the stones marking the outer face of the western side of the building.

PLATE VIII



Illustration 10. Stone building, Area B1: northwestern corner with plastered floor (looking north).

White floor is preserved up to the edge of the wall. The mudbrick is preserved in the lower right (same corner as in Illustr. 11); elsewhere only the stone substructure is preserved.

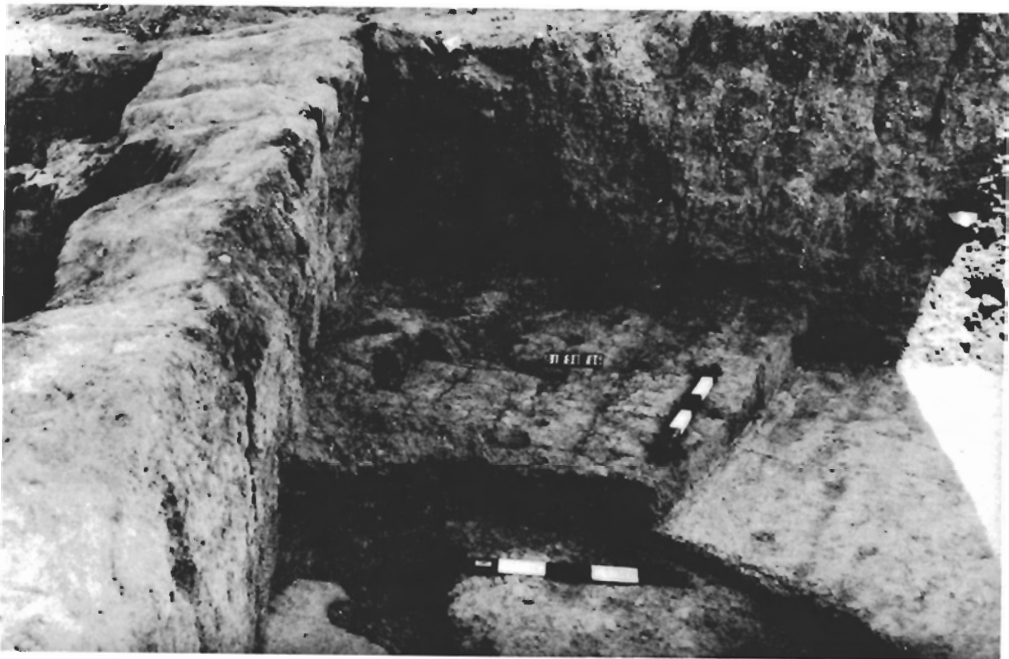


Illustration 11. Stone building, Area B1: detail of brick wall on stone foundation and white floor.

On the lower right corner the white plastered floor rides up to, and curls up against, the lower course of bricks of the wall. The thickness of the plaster shows in the section of the shallow round depression in the lower center of the photograph.



Illustration 12. Stone building, Area B1: broken storage vessel on outside floor in southwestern corner, of Pebble Tempered ware.



Illustration 13. Stone building, Area B1: reconstructed storage vessels on outside floor in southwestern corner.

Restored Pebble Tempered storage vessel on lower left and restored rope decorated jar on upper left; both were found on floor B1f19.

PLATE X



Illustration 14. City wall, Area K1: direct overhead.

The long narrow trench has exposed the base of the glaxis (lower portion) and the inside of the city wall (K2): the slope of the tell reveals the brickwork of the eroded core of the city wall. Larger sounding at the base of the city wall is Locus A (see Figure 13).



Illustration 15. City wall, Area K1: front view, before excavations.

The cut in the side of the tell results from local farmers using this area to gather soil for mud bricks.

Illustration 16. City wall, Area K1: detail of north section in Locus A (see Figure 13). The plastered exterior face of the city wall shows on the right, the bricks are lying horizontally on top of the burnt deposit (K1f16). The top of the glaxis shows clearly, still partly covered by a portion of the burnt deposit.

Illustration 17. City wall, Area K1: frontal view, after scraping of vertical face (looking west). Preserved height of city wall, from the surface of the glaxis to the top of the brickwork, is about 5 m. The top portion represents later deposit resting on top of the brickwork (part of which is removed in the continuation of the trench visible in Illustration 19).

Illustration 18. City wall, Area K1: general view of Locus A (looking north). Eroded core of wall, with articulated brickwork, shows on the right, with top surface of glaxis riding up to its base. Talus of High Mound shows in background.

Illustration 19. City wall, Area K1: general view of glaxis with burnt deposit and face of city wall (looking west). Trench cut perpendicular to the city wall shows the steep slope of the glaxis; in the background the base of the wall and above it the trench cut at the top of the mound to expose the inner face of the city wall. Clearly visible are both the even surface of the glaxis and the thickness of the burnt deposit.



Illustration 16.

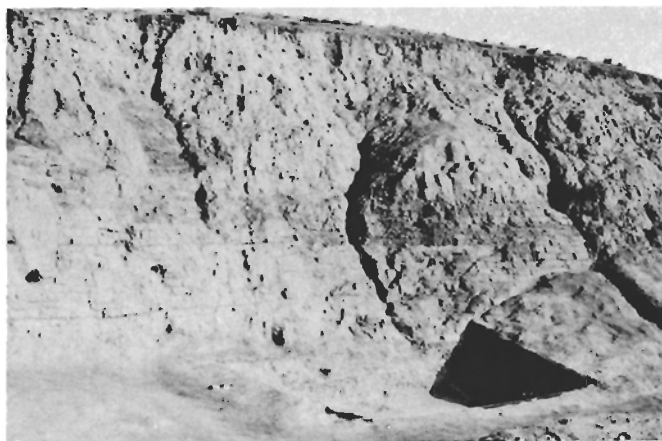


Illustration 17.



Illustration 18.



Illustration 19.

PLATE XII

Left:	Mid left:	Mid right:	Right:
M1 205	M1 200	M1 189	M1 203
M1 206	M1 196	M1 199	M1 204
B1.40	M1 193	M1 188	M1 202
M1 195	M1 201	M1 190	M1 187
M1 192	M1 197		M1 186
M1 194	M1 198		M1 185
M1 191			M1 184

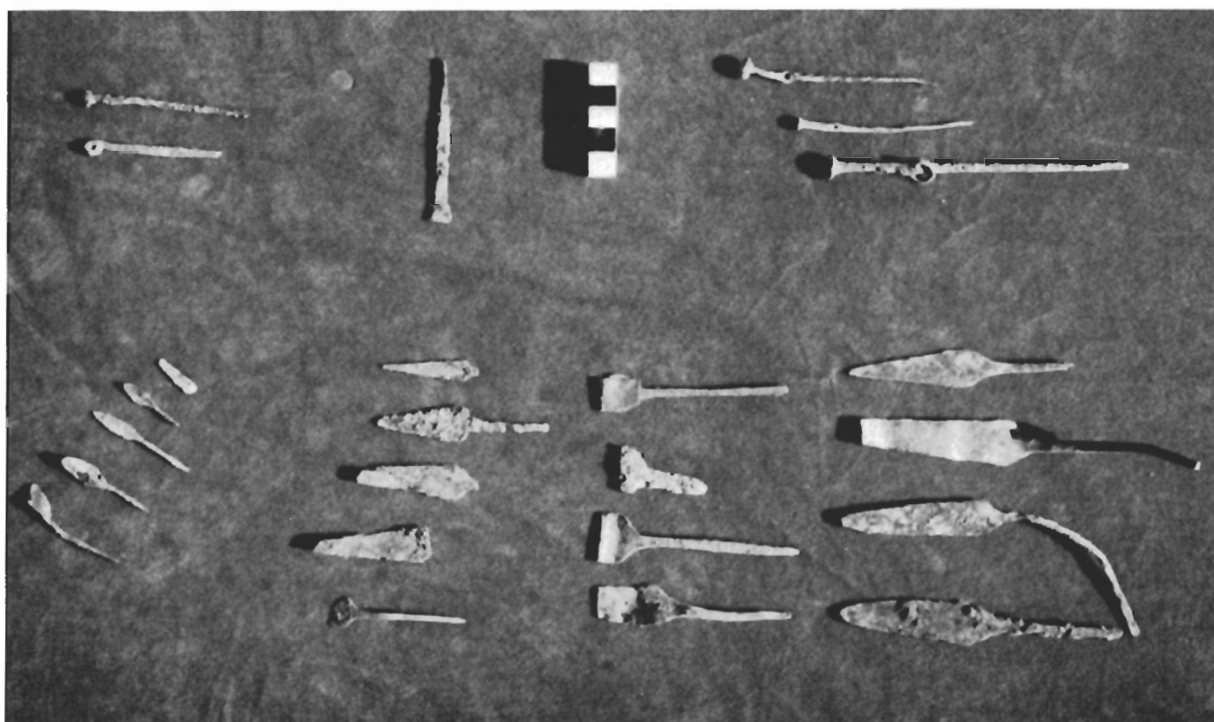


Illustration 21. Assemblage of metal objects (Areas B1 and K1).

The three pins at the upper right are from the burnt deposit in K1, the points at the lower right are mostly from the northwestern portion of B1, and the small spoons at the lower left are mostly from the central portion of B1.

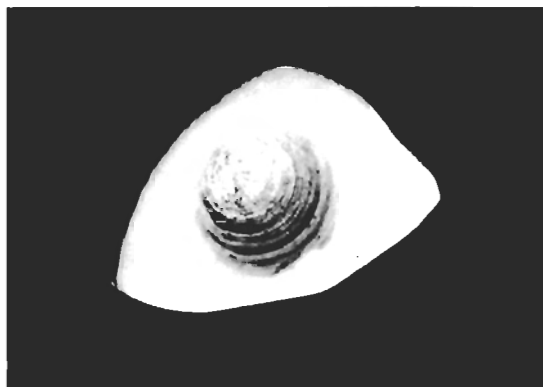


Illustration 20. Eye socket of statue (Area B1).

M1 210 (B1.19). The socket, with traces of bitumen in the hole for a colored pupil, was found among the stones in the southwestern corner of the building.



Illustration 22. Spouted mid third millennium vessel (Area K1).

M1 52 (K1.12-2). Simple ware with darker traces and burnt-on clay from secondary firing (from the burnt deposit K1f16).

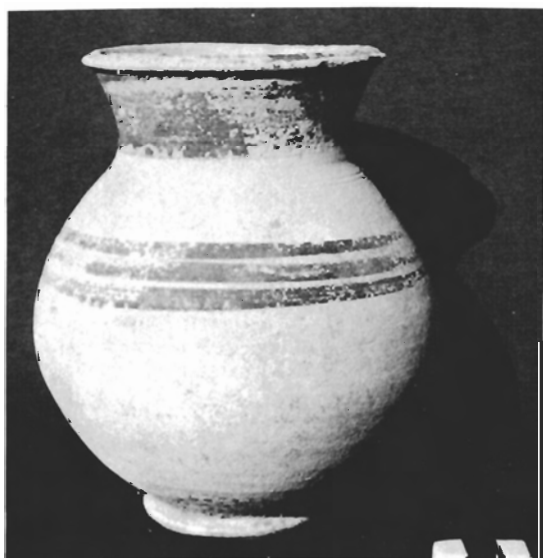


Illustration 23. Khabur ware jar (Area B1).

M1 82 (B1.73). From the destruction stratum above the white floor of the stone building.

PLATE XIV

Left column:

K1.24
M 1 175
M 1 168
K1.87
K1.75
K1.70
K1.76
K1.13
K1.63
K1.77

Right column:

M 1 171
M 1 179
M 1 169
M 1 181
K1.16

Center column:

K1.20
K1.25
K1.72
K1.18
K1.41
K1.78
K1.46
M 1 172

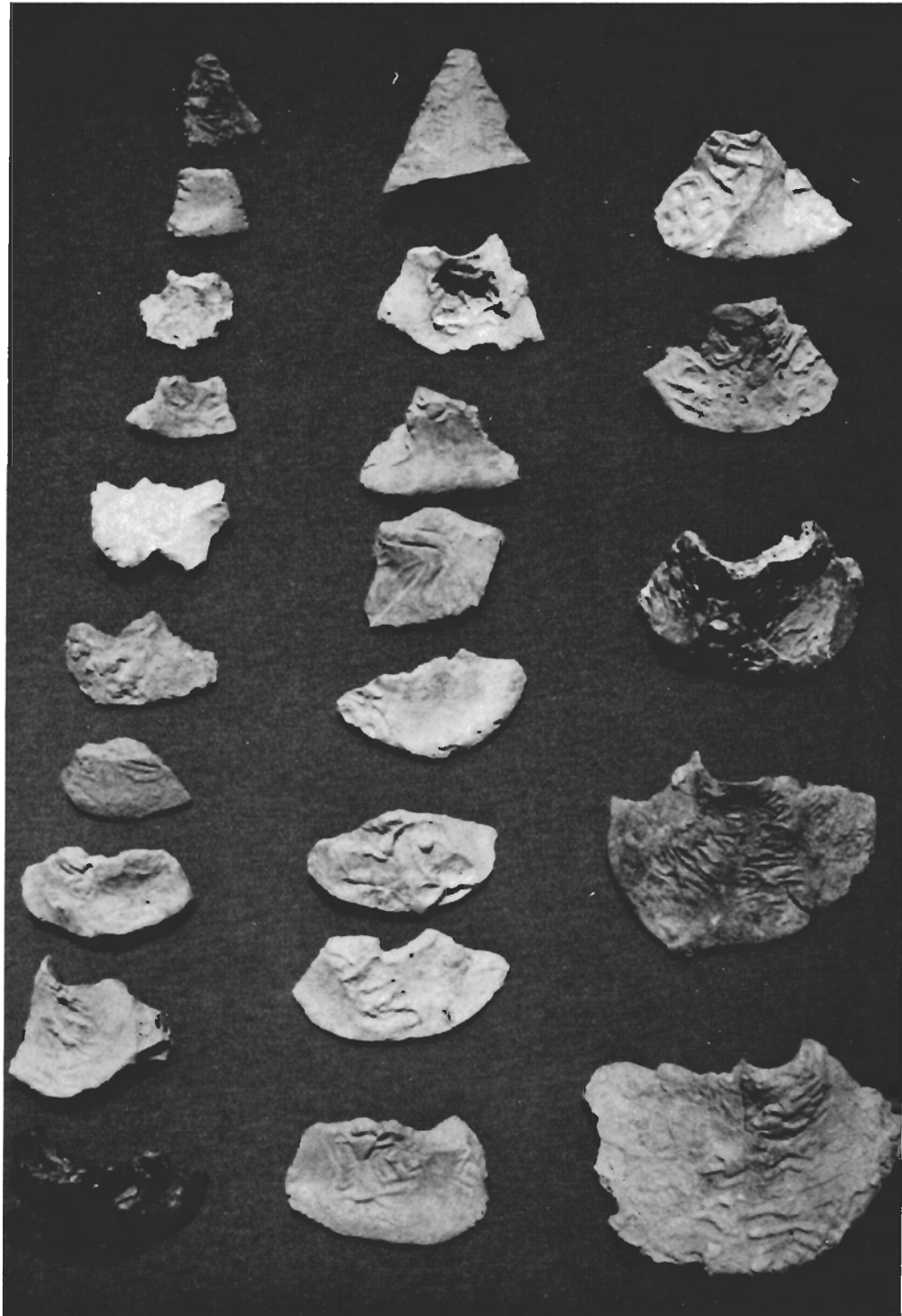


Illustration 24. Assemblage of door sealings (Area K1).

All sealings are from Area K1, feature 16, the burnt layer.



Illustration 25. Detail of bottom of door sealing (K1.25). Flat wood impression on the bottom and two strands of rope impression along the central cavity.

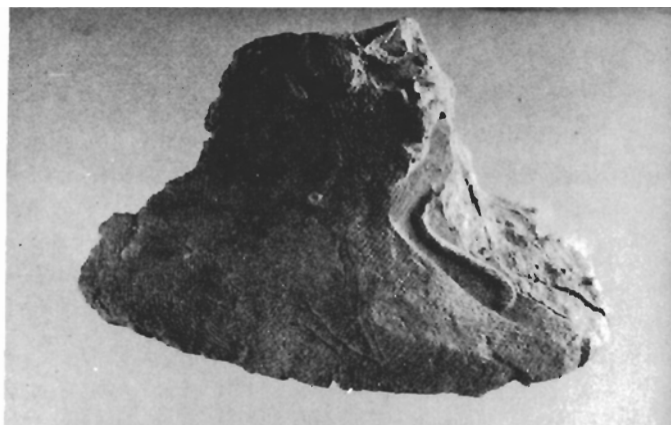


Illustration 26. Characteristic shape of door sealings (K1.78).

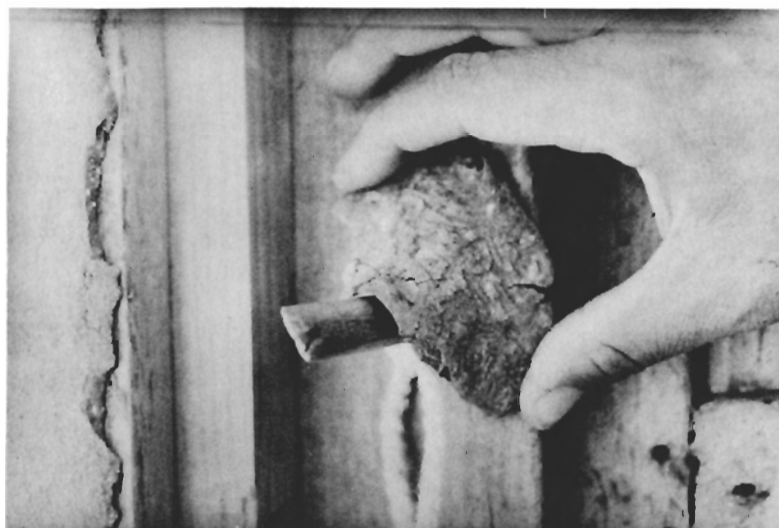


Illustration 27. Reconstruction of door sealing on modern door.

PLATE XVI

SEALINGS FROM THE BURNT DEPOSIT OUTSIDE THE CITY WALL (K1f16), MID THIRD MILLENNIUM



Illustration 28. Seal impression on shoulder of large jar

M1 167 (K1.6). The sealing is reversed with respect to the orientation of the jar (in this photograph the neck of the jar is at the bottom).



Illustration 29. Seal impression on rectangular tag

M1 168 (K1.8). The seal is rolled on the preserved length of the tag and fills the entire surface.



Illustration 30. Door sealing: crossed animals

M1 172 (K1.50). Traces of a human figure and a lion; cloth impressions also shown.

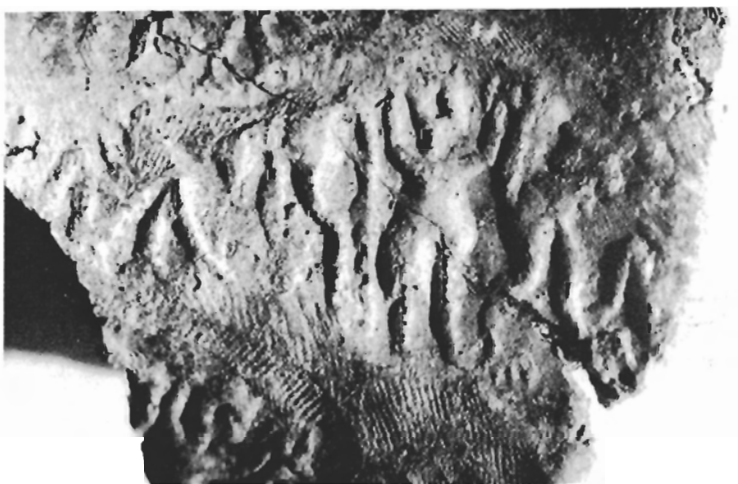
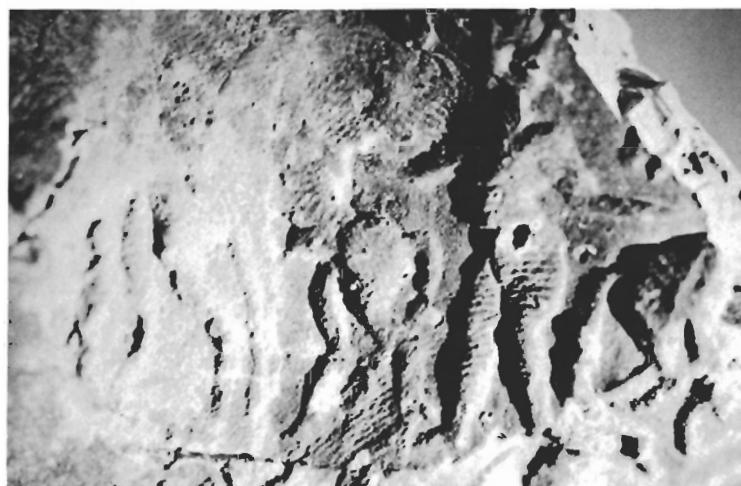


Illustration 31. Door sealing: hero with dagger

M1 181 (K1.92). Hero with dagger between two animals; traces of cloth show that the cloth impressions were on the clay before the seal was rolled.



Illustration 32. Seal impression: snake coil and horned quadruped
M1 171 (K1.45).



Illustrations 33-35. Seal impression:
hero between rampant animals

M1 169 (K1.29) Nude hero with tufted hair
between two bearded animals; three different
details of the impression.

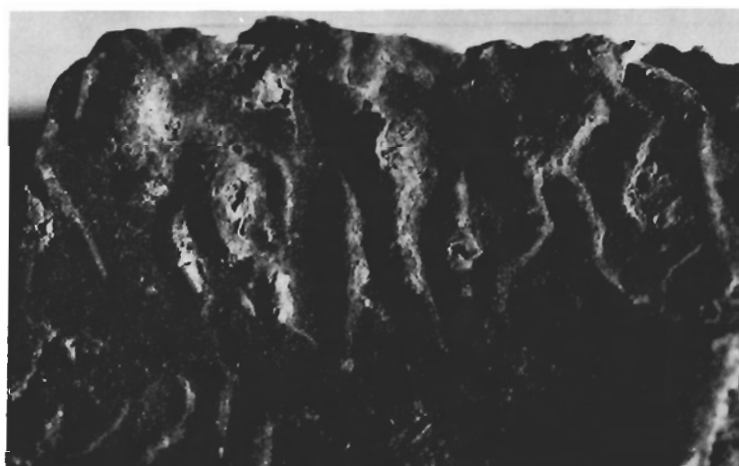
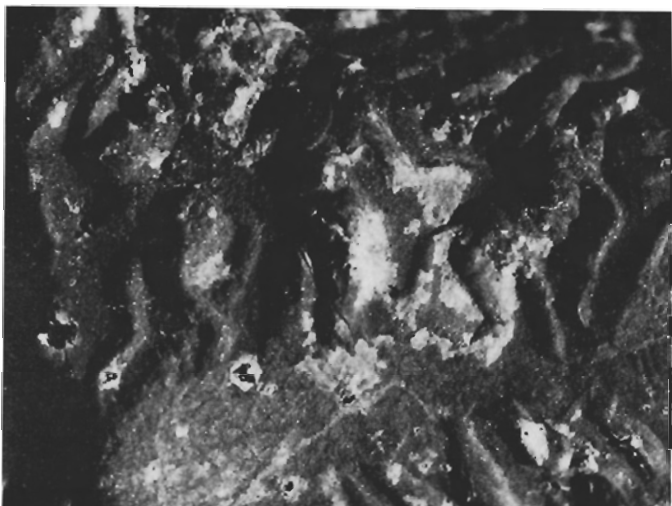


PLATE XVIII

Illustration 36. Seal impression: hero with rampant animal and crossed animals

M1 177 (K1.69). Hero and bearded horned animal; a pair of crossed lions.



Illustration 37. Seal impression: hero with skirt holding plant, with animal

M1 174 (K1.52). Skirted figure holding a stick and a bag(?) behind an animal.

Illustration 38. Seal impression: double animal file

M1 180 (K1.82). Two rows of animals with short tails, ears or short horns, and large eyes.





**Illustration 39. Seal impression:
geometric design**

M1 173 (K1.51). Door sealing from burnt deposit outside the city wall, mid third millennium; geometric pattern (guilloche?).

**Illustration 40. Seal impression:
rampant bearded animal**

M1 75 (K1.17). Door sealing from burnt deposit outside the city wall, mid third millennium; rampant animal (antelope?) with beard, horns, and short tail.



**Illustration 41. Seal impression:
impaled(?) scorpion**

M1 183 (K1.17). Door sealing from general surface of mound.

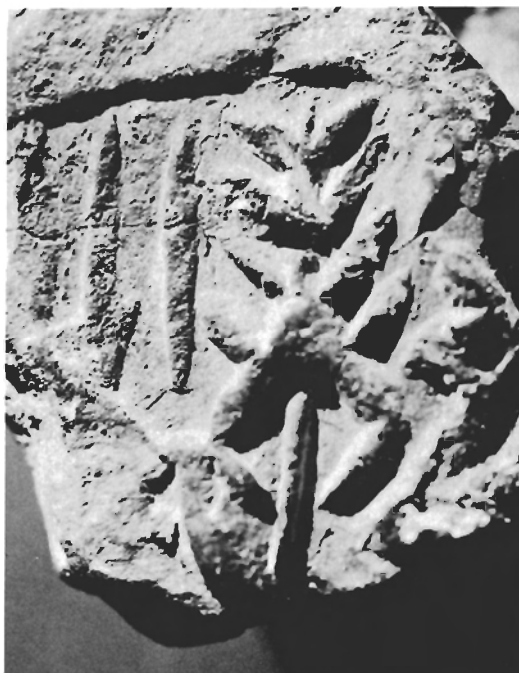


Illustration 42. Two stamp seals

M1 183 (Z1.20 on right and Z1.17 on left). From general surface; two stamp seals with circular geometric pattern.





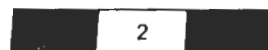
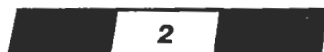
Illustration 43. Tell Shermola: the central mound (looking northwest).



Illustration 44. Tell Shermola: button base goblet (base).



Illustration 45. Tell Shermola: carinated shallow bowl.



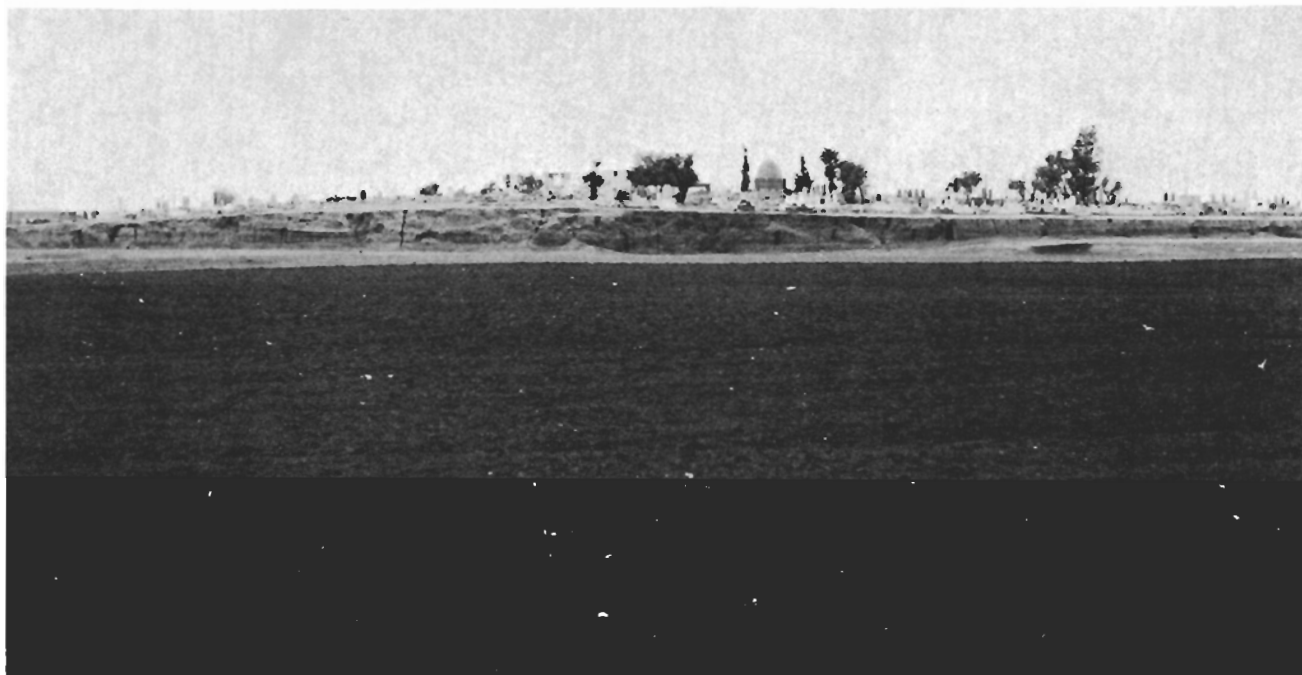


Illustration 46. Tell Shermola: the lower mound (looking west).



Illustration 47. Tell Shermola: the lower mound (looking north).

PLATE XXII

Illustration 48. The Urkish lion in the Metropolitan Museum of Art: front view.



Illustration 49. The Urkish lion in the Metropolitan Museum of Art: side view.



Illustration 50. The Urkish lion in the Metropolitan Museum of Art: three-quarter view.



Illustration 51. The Urkish lion in the Metropolitan Museum of Art: top view.

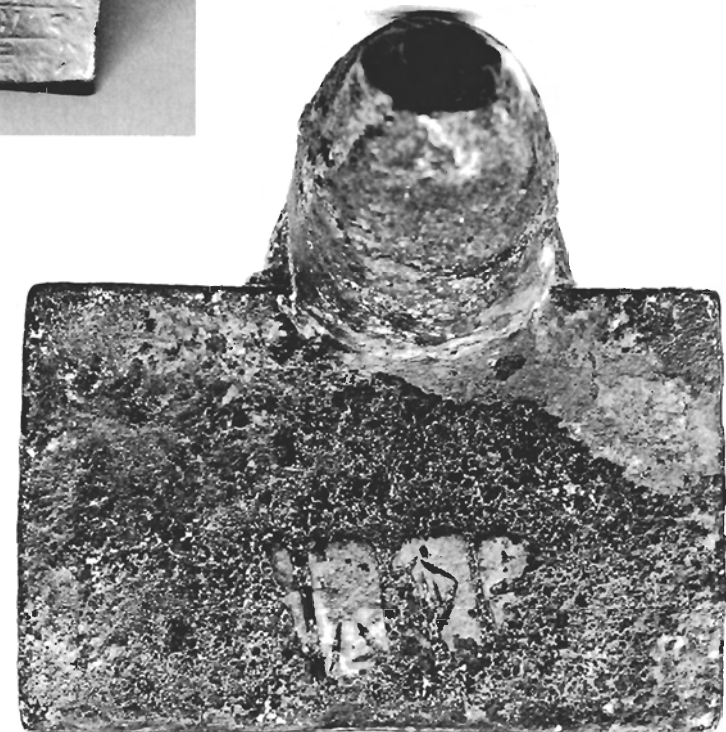
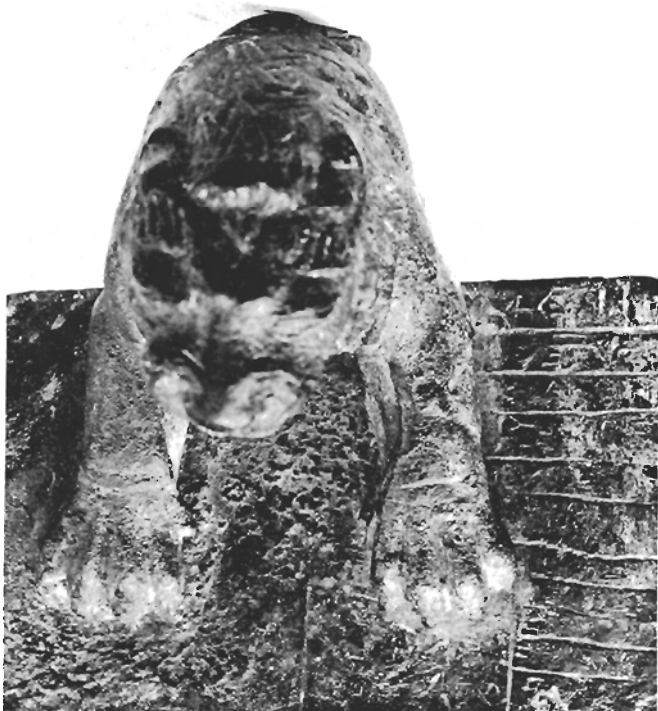


Illustration 53. The Urkish lion in the Louvre: bottom view.

Illustration 52. The Urkish lion in the Louvre: top view.

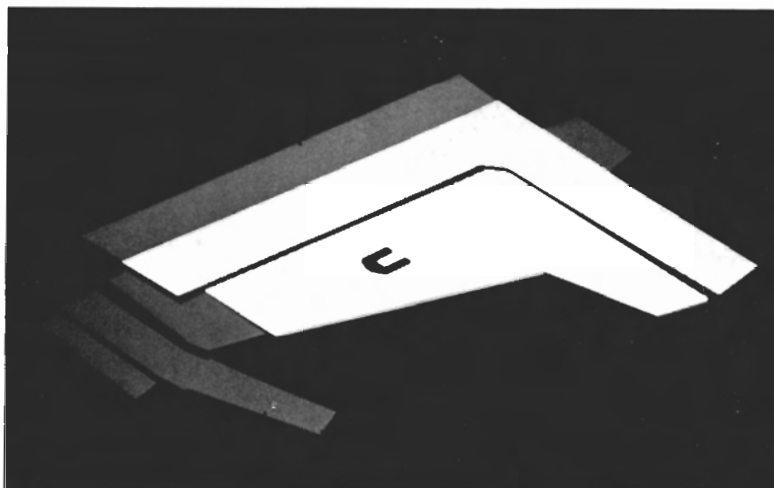


Illustration 54.

COMPUTER GENERATED RENDERINGS OF THE STONE BUILDING IN AREA B1

Illustration 54. Partially excavated foundations of stone building in Area B1 (viewed from the southeast).

The right-angle wall (light area) and its two additional parallel walls (dark gray) enclose the white floor (white area) with its horseshoe-shaped hearth. To the south of the white floor is the stone ramp (dark gray). To the north of the white floor is the brick-paved area (light gray).

Illustration 55. Axonometric perspective of Tell Chuera-style 'in antis' temple reconstruction at Mozan (viewed from the southeast).

The 'in antis' temple reconstructed on the Mozan foundations is entered via five steps from the east (this entrance is purely hypothetical, since this portion of Area B is currently unexcavated). The altar is on the west wall, flanked by two pairs of engaged pillars. The stone ramp serves to connect the cella with the exterior or perhaps a stone courtyard via the south. A doorway on the north wall connects the ante-cella with the brick-paved area north of the white floor.

Illustration 56. Low-angle perspective of Kish-style reconstruction at Mozan (viewed from the south).

The Mozan foundations are seen as part of a much larger 'palatial' structure which includes a second story. The stone ramp connects to the white floor through a portico. This in turn connects to the second story via a stairway whose lower steps can be seen rising just beyond the north wall of the portico.

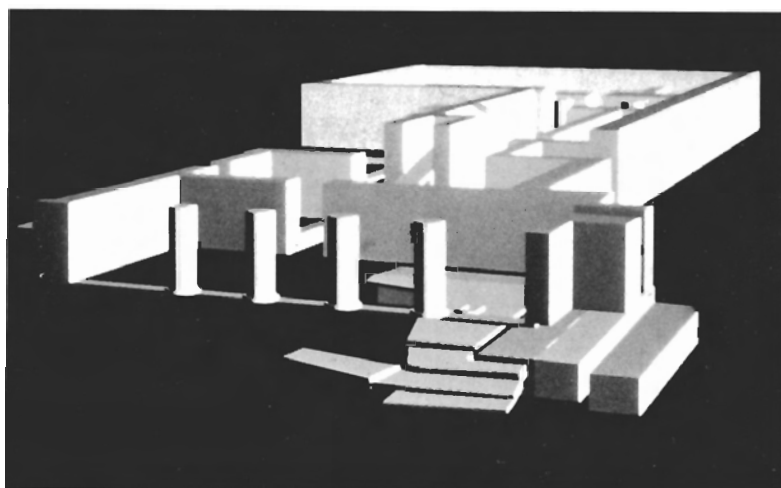
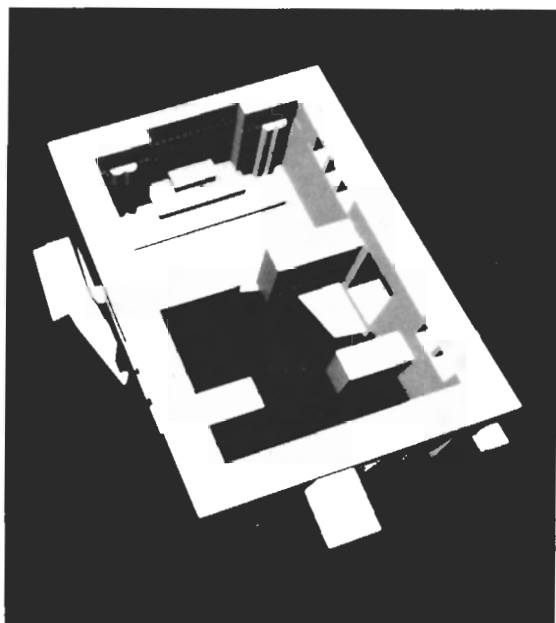


Illustration 56.

Illustration 55.



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Volume Twenty

Mozan 1

The Soundings of the First Two Seasons

**Giorgio Buccellati and
Marilyn Kelly-Buccellati**

MOZAN 1

THE SOUNDINGS OF THE FIRST TWO SEASONS



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ABSTRACT

Preliminary soundings were conducted at Tell Mozan in the north-central portion of the Khabur plains in 1984 and 1985. The site has proven to be a major urban settlement of the third millennium and early part of the second millennium, with the possibility that it may correspond to ancient Urkish, known to have been a major Hurrian center in the early periods.

This volume reports on the finds made as well as on various aspects and research goals of the project. After a presentation of the environmental, historical, archaeological and methodological considerations which provide the project its special scope, the following topics are covered: the two surface *surveys* of the High Mound and Outer City respectively; the *excavations* of the City Wall at the base, and of a stone building at the top of the High Mound; the *artifacts* found during the excavations, with special reference to an important group of seal impressions mostly on door sealings; paleobotanical and ¹⁴C *samples*; the beginning of a *regional survey* in the immediate vicinity of Tell Mozan; an art historical discussion (by O. W. Muscarella) of the *Urkish lion pgs* preserved in the Louvre and the Metropolitan Museum of Art; and the application of *computer aided design* techniques to a study of the stone building on top of the High Mound. More than 200 objects are given in line drawings, and more than 50 black-and-white photographs illustrate various aspects of the report.

Color documentation for the material presented in this volume is available from Undena Publications in the form of 20 slides published as set No. 1 within the series *Photographic Data Sets (PDS-1)*. Reference to the slides is given in the text.

The text portion of this volume is also available in electronic format as disk No. 1 in the series *Cybernetica Mesopotamica — Volumes (CMV 1A)*, also published by Undena Publications under the sponsorship of IIMAS — The International Institute for Mesopotamian Area Studies.

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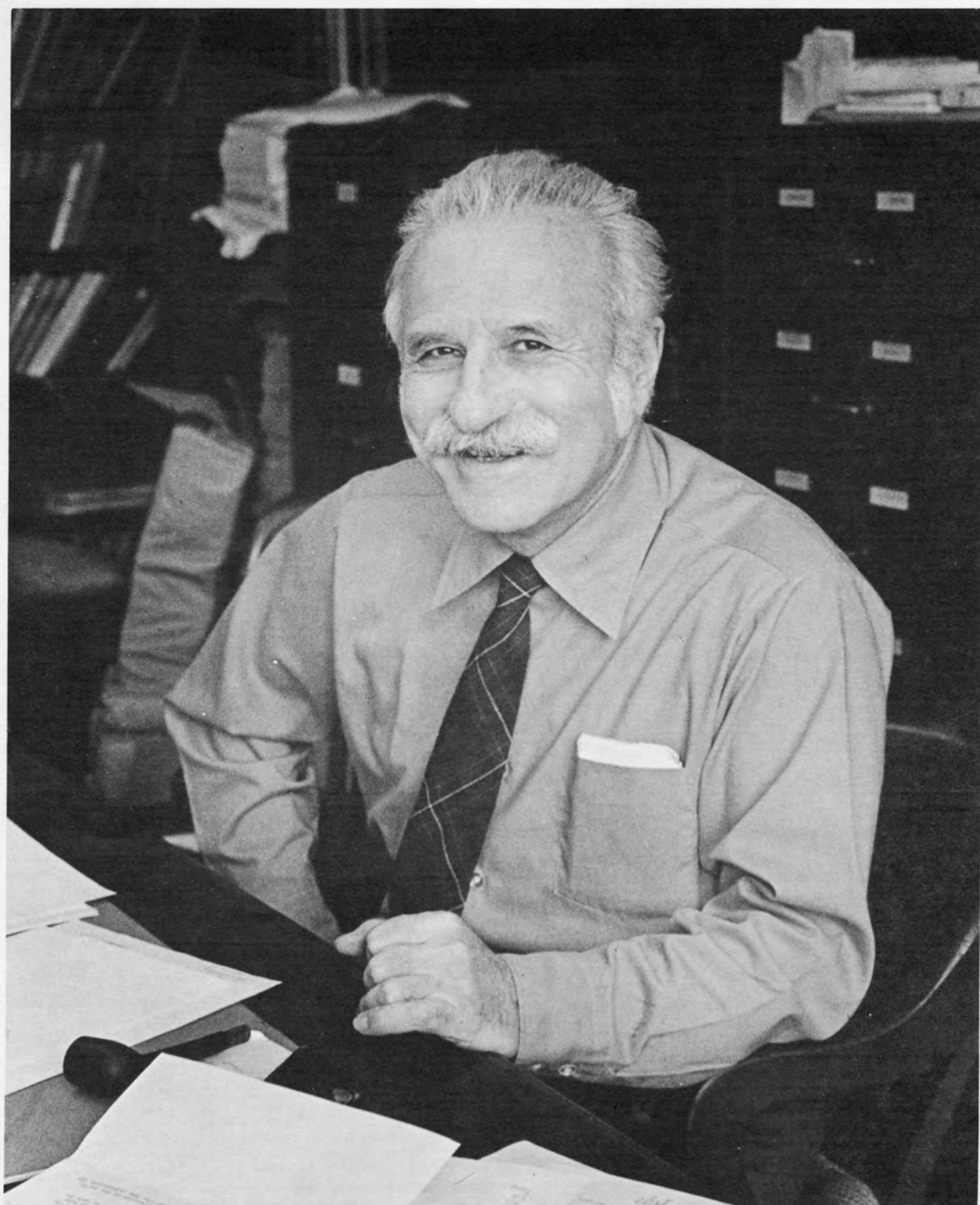
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**In Memory of I. J. Gelb
Who Showed Us the Way**

PREFACE

The wheatfields of the Khabur have seen many a harvest over the millennia, but none perhaps as significant as the archaeological harvest which a number of expeditions have begun to reap in recent years. We have to thank for this the enlightened policies of the Syrian authorities, which have consistently welcomed and encouraged an unprecedented expansion of scholarly activity in their country. As a result, whole new vistas have been emerging not only for the history of Syria, but more broadly for the history of the ancient Near East as a whole. The Khabur region is especially attractive because it is generally less well known, while at the same time it gives every evidence of having been a crucible of civilization on a par with Sumer in the South or Ebla in the West.

Our new excavations at Tell Mozan are in line with these general developments on the one hand, and with our own specific interests on the other. The work we have been conducting at Terqa and Qraya for the last ten years have given us a special appreciation of the larger regional dimension within which the history of those two sites has to be understood. The Khabur region provides the natural setting for such a broader scope of inquiry. Terqa and Qraya are at the heart of both the fertile mid-Euphrates trough (known today as the *zor*) and the high-ground steppe dotted with springs and wells (known in ancient times as the *nawu*). They are also at the mouth of the Khabur, which serves as a major artery linking the *zor* with the "upper country" (the *matum elitum*, as it was known in ancient times). The start of a new excavation project in this "upper country" will thus allow us to develop a true regional project, based on concurrent field work at different sites, conducted with parallel methodology and direct cross-information. We hope that such long term and broadly based research may yield proportionately greater insights in the archaeology and history of the area, and serve as a significant experiment in the methodology of regional studies.

In and of itself, Tell Mozan seems to hold in store archaeological promises of the greatest magnitude. Its size makes it one of the largest settlements in the region, in fact one of the largest in ancient Syria if the preliminary indications for a vast lower city are verified by future work. The homogeneity of the deposit, which belongs predominantly and throughout to the third millennium, is just as impressive. And the circumstantial evidence which seems to suggest a possible identification of the site with Urkish provides a tantalizing working hypothesis for an interpretation of the pertinent historical framework. Regardless of

what the answer might be to the questions of either identification or size, Mozan is certain to prove a major site for the understanding of the civilization in the piedmont area, which not only thrived on rain-fed agriculture, but also served as the link between the mountain regions with their rich reserves of metal ores to the north and the urban states in the southern alluvium. Only the discovery of third millennium epigraphic material, of the type known through the Urkish lions, may allow us to define such culture as Hurrian: and that the prospect of such discovery is realistic is suggested by the fact that the inscriptions on the Urkish lions presuppose an important and autonomous scribal tradition that must have been at home in the Khabur plains.

As we were articulating our overall research design for the excavations at Mozan, we had made plans to have Dr. I. Jay Gelb join us in the field in the Spring 1985. In spite of his lifelong work in this general region, he had never been able to travel there, and we were eager to offer him, our personal mentor and friend for so many years, this opportunity. The potential significance of Mozan for an understanding of Hurrian civilization was especially inviting from a scholarly point of view, and we had great hopes to be able to develop with him a long term plan for the full historical evaluation of our findings there. For family reasons he was not able to join us in 1985, and so we postponed his visit until 1986. Or so we thought. The sudden illness which struck him in the Fall of 1985, and his death on the 22nd of December 1985, were to sadly alter all our plans. We can only, at this date, dedicate this first volume of the Mozan Reports to his memory — a small token of the strong human bond which united us as friends, and, we hope, a meaningful indication of the reverberation that his fundamental work on the Hurrians has left for the field.

It is with special pleasure that we recall one of our preliminary visits to the site in 1983, when we were joined by Dr. Herman L. Hoeh of the Ambassador International Cultural Foundation and a trustee of IIMAS — The International Institute for Mesopotamian Area Studies. As we looked together from the commanding position of Tell Mozan at the mountains to the North and the rolling plains to the South, we shared a precious moment in which the potential historical significance of the site seemed to blend with the sheer beauty of the landscape and elicit in us the resolve for an expanded new commitment to the archaeology of the region. The association with the Ambassador International Cultural Foundation, whose sponsorship has made it possible for us to develop the ambitious project on which we report here, was celebrated in a special way with the visit to Damascus in the Spring of 1985 by Mr. Herbert W. Armstrong, President of the Foundation. This was to be his last trip overseas before his death, and while he could not come as far as Mozan, where we were excavating at the time, we were able to share with him two days in Damascus, where he was most graciously hosted by the Minister of Culture, Dr. Najah Attar, and the Director General of Antiquities and Museums, Dr. Afif Behnassi.

We consider ourselves privileged to be able to be a part of these significant new developments in Syrian archaeology, and fortunate to be the recipients of the traditional and unmatched Syrian hospitality, at both the official and personal level. Especially at a time like today, it is but a small witness to truth to say that we feel as welcome in the contemporary Syria we have come to know through living there as in the ancient periods of her history, to the reconstruction of which we are happy to contribute.

G. B. and M. K-B.
15 April 1986

Because of a series of vicissitudes beyond our control, publication of this volume has been unfortunately delayed for over a year. Publication in its present form is essentially the same as had been originally submitted in completed form by the Fall of 1986, without updates (except for references to *PDS-1*).

A special note of gratitude is owed Dr. Alexis Martin, who with the greatest skill and personal commitment has provided the indispensable ingredients for seeing this volume through to its final publication.

6 January 1988

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