

## Interpreting the Maya “Collapse”:

### Continued Investigation of Residential Complexes in and near Caracol’s Epicenter: 2009 Field Report of the Caracol Archaeological Project



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The 2009 field season of the Caracol Archaeological Project ran from late January through the middle of March. The project was staffed by 32 people (Table 1). The research undertaken at Caracol during the 2009 field season had three specific field objectives. The first goal was to complete the axial excavation of Structure C20, started in 2008. The second goal was to begin a new program of settlement research focusing on the use of LiDAR to attempt to document Caracol’s outlying settlement. The third, and primary, archaeological focus for the 2009 field season was to begin a three-year program to analyze residential and status differences among Caracol’s elite inhabitants at the time of the Maya Collapse; these excavations focused exclusively on the Northeast Acropolis during 2009.

#### **Goal 1: Continuation of the 2008 Research**

During the 2008 field season, Structure C20 was axially trenched and yielded a series of special deposits that included 3 interments and 2 caches. These excavations and deposits are fully detailed in the 2008 Season Report for the Caracol Archaeological Project ([www.caracol.org](http://www.caracol.org)). Also recovered in the course of the axial penetration of Structure C20, however, were the capstones for another interment. The central capstone was lifted, revealing an open-air space that dropped 0.7 m down to a dirt surface; although no one went inside the chamber, it was estimated that the rough-walled tomb minimally measured 2 m from north-to-south by 1.2 m east-to-west. Because multiple deposits were in the process of being excavated and so as to not rush the investigation, the capstones were replaced and the trench was backfilled in 2008 in anticipation of proper excavation in the future. During the 2009 field season, this tomb was in fact excavated and the results of its investigation are reported below.

## **Goal 2: Lidar Mapping and Ground Checking of Caracol's Settlement**

In conjunction with Dr. John Weishampel of the UCF Department of Biology, funding was awarded through a NASA/NSPIRES grant both to gain biological information for the Caracol area and to attempt to document the settlement, terraces, and other constructed features that form ancient Caracol's landscape through the use of remote sensing information (IKONOS imagery and LIDAR radar). Because the funding transfer took longer than was projected – and due to the need to undertake LiDAR flights at the end of the dry season, the project ran behind the original schedule developed for the grant proposal. Prior to the 2009 field season, IKONOS imagery had been acquired and analyzed by Dr. Weishampel, but had not yielded significant results. In February 2009, the collection of on-the-ground tree and canopy data commenced with a biology graduate student who was housed with the archaeological project; this data collection will continue during the 2010 field season. The National Center for Airborne Laser Mapping undertook over-flights of Caracol in late April, after the 2009 archaeological excavations had been completed; these flights produced LiDAR DEM (Digital Elevation Model) data for both the treetop canopy and the ground level for 200 square kilometers of the site. The point data and DEM were provided to the project in early June and are in the process of being analyzed. It should be noted, however, that the LiDAR over-flights provided data that was far beyond original expectations. These data have resulted in the identification of 11 new causeways, 5 new termini, and thousands of new residential groups and terraces (Figures 1 and 2). While the validity of the LiDAR data could be confirmed through comparison to previous mapping, additional ground testing will be undertaken during the 2010 field season.

## **Goal 3: Caracol's Northeast Acropolis: Primary Focus of 2009 Field Season**

The Northeast Acropolis, an elite complex located in the site epicenter immediately adjacent to Caana, constituted the main focus of archaeological research undertaken during the 2009 field season (Figures 3 and 4). The research in this complex was funded by the Alphawood Foundation and constituted the first year of a three-year project to investigate elite residential complexes in order to garner more information about artifactual subcomplexes at Caracol at the time of the “collapse.” During the 2009 field season, both Structures B32 and B33 in the Northeast Acropolis were areally excavated and penetrated. The northern side of Structure B31 was also cleared for architectural detail and exterior testing was carried out in the vicinity of Structure B30. The southern base of the platform supporting the Northeast Acropolis was also tested. Previously, the eastern building, Structure B34, had been excavated, yielding a series of deposits that spanned the Late Preclassic through Terminal Classic Periods. These earlier archaeological investigations had suggested that the elevated plaza in the Northeast Acropolis had been raised approximately 2 m during the late Late Classic to Terminal Classic Period. Thus, the Northeast Acropolis was deemed to be a logical locale for the further investigation of late occupation at Caracol. By cleaning out what were expected to be stone buildings in this raised architectural complex, it was hoped that *in situ* refuse would be recovered that could be compared with material from other epicentral palaces. This did in fact turn out to be the case. However, the magnitude of Terminal Classic modification to this architectural complex only became clear with the deeper penetration of Structure B32 and the discovery that the entire western portion of the Northeast Acropolis was a very late addition that accompanied the raising of the plaza. The 2010 field season will attempt to determine the full extent of the Terminal Classic building effort at this locale and to define the earlier architectural form of the Northeast Acropolis in order to see how the function of this group may have been altered by Caracol's latest inhabitants. Basal clearing of Structure B33 and B34 during 2010 is likely to recover new Terminal Classic refuse. All of these data should help further our understanding of Caracol's Terminal Classic Period and the events leading up to the final abandonment of the city.

## **Interpreting the “Collapse”: Background for 2009 Research in Northeast Acropolis**

Despite almost two centuries of research, the factors resulting in the Classic Maya collapse remain unresolved. Originally defined in terms of a cessation in the creation and erection of stone hieroglyphic monuments, conjoined with a stoppage of the construction of massive stone temples and palaces in the lowland areas of Belize, Guatemala, and Mexico, the collapse occurs primarily in the 9<sup>th</sup> century A.D. However, its timing varies substantially from site to site throughout the Southern Maya lowlands. The Maya collapse has additional import when viewed in

relation to the contemporary turbulent political climate, with scholars and lay public alike wondering if ancient situations may have modern parallels – or, more far afield, even provide “warnings” for our own society. Archaeological investigations at Caracol, Belize have provided tantalizing clues to this transition, documenting dramatic changes in the site’s socio-political and economic systems between the Late Classic (A.D. 550-780) and Terminal Classic (A.D. 780-950) Periods. Contemporaneous differences exist in the ceramic assemblages utilized by Caracol’s highest epicentral elite as compared to other segments of the Terminal Classic society. Non-epicentral, secondary elite, even those living in palaces, appear not to share in the use of the epicentral subcomplex. Thus, further investigation of both epicentral and non-epicentral elite residential compounds is expected to shed light on what transpired just before Caracol’s collapse. In order to gain a comparative sample from an elite epicentral complex, excavations during the 2009 excavation season were directed toward recovering appropriate materials from Caracol’s Northeast Acropolis. While the eastern building in this group had been trenched in the 1990s and had produced some materials dating to the Terminal Classic Period, none of the other structures had been investigated. Thus, the Northeast Acropolis was deemed to be an appropriate locale for gathering the data that could aid in detailing the significant changes in Caracol society that occurred between the Late and Terminal Classic Periods.

### **The Problem: Understanding the Nature of the Maya Collapse**

The Classic Maya collapse is among the most debated enigmas in modern archaeology. New proposals claiming to explain the Maya denouement appear yearly, usually receiving substantial newspaper and television coverage. The end of Maya civilization has been publically portrayed as either due to drought (History Channel *Ancient Apocalypse: The Maya Collapse*) or due to destructive warfare and sacrifice (*USA Today* and *New York Times* November 17, 2005; Discovery Channel *Explorer: Last Days of the Maya*); the collapse of the Maya has also been linked to prophetic “end-of-the-world” scenarios correlated with December 21, 2012 (History Channel *Mayan Doomsday Prophecy*). These are intriguing postulations that play well for the media and public, but they are based on archaeological data that are open to other interpretations. Academically popular single-cause explanations for the Classic Maya collapse include a host of factors (Aimers 2007), but often center on discussions of internal and external warfare (A. Chase and D. Chase 1989; D. Chase and A. Chase 2002, 2003; Demarest 1993, 1997a, 1997b, 2004; Sabloff and Willey 1967 [but see Binford 1968]; Willey 1990), drought (Hodell et al. 1995, 2001; Gill 2000, Gill et al. 2007), and environmental degradation (e.g. Copan, Webster 2002; Webster et al. 2004 [but see Fash et al. 2004]). It is apparent, however, that the collapse was a more complex phenomenon that both spanned a substantial period of time and had a variety of impacts among and within individual sites.

Previous archaeological investigations at Caracol, Belize have shown that the site contains abundant Late and Terminal Classic (collapse-related) remains (A. Chase and D. Chase 2007; D. Chase and A. Chase 2000). This research has suggested that the leaders of Late Classic Caracol utilized a distinct management strategy characterized by symbolic egalitarianism (A. Chase and D. Chase 2009; D. Chase and A. Chase 2006), resulting in a shared identity and prosperity throughout Caracol’s population (D. Chase and A. Chase 2004). Through symbolic egalitarianism, the majority of Caracol’s Late Classic population had access to material and ritual items that were normally restricted at other Maya sites. In the Terminal Classic Period, however, this strategy appears to have been abandoned. Rather than having a relatively homogenous archaeological distribution of material culture (as occurred in the Late Classic), it appears that social differences were emphasized during the Terminal Classic. The uppermost elite appear to have used a distinct ceramic subcomplex, as well as to have had access to goods that were no longer available to the general populace (A. Chase and D. Chase 2004, 2005a). This move away from symbolic egalitarianism is perhaps the catalyst for the ultimate collapse of Caracol.

Key to understanding the collapse at Caracol, then, is greater exploration of Terminal Classic deposits to outline changes in management strategies and social access to material and ritual items, as well as to determine the areal extent of the high status ceramic subcomplex at Caracol and the degree to which these remains are associated with royal, as opposed to other elite, occupation. To this end, two different locations were selected for archaeological investigation over the course of a three year period from 2009 through 2011 (Figure 3). Both are residential groups.

One likely represents high status, possibly non-royal, occupation and is the Northeast Acropolis. The other residential area is located west of the site epicenter (Structures F30-F42) and likely housed high status members of Caracol's secondary elite. Taken together and placed within the context of previous long-term work at Caracol, these two groups should provide sufficient detail to elucidate the changes that occurred and the variability that existed in pre-collapse Caracol social, political, and economic organization.

### **Northeast Acropolis: Structures B30-B34**

The Northeast Acropolis is situated on a raised platform immediately east of Caana (Figure 3). The acropolis commands the northern end of a broad plaza that is bordered by Caana to the west and by the Barrio palace complex to the east (A. Chase and D. Chase 2001). Six structures are located on top of this elevated platform (Figure 4); a tall range building, Structure B33, dominated the northern side of the complex; another range building, Structure B32, was located on the western side of the elevated plaza; the eastern side of the plaza contained an elevated pyramid, Structure B34, that functioned as the group's residential shrine; two low constructions, Structures B30 and B31, defined the southern end of the plaza and a small low platform, Structure B150, was located at the southwest corner of the complex. Based on the mapped plan, it was believed that any formal entryway to this raised acropolis area would have had to pass through one or more buildings, as represented by Structures B30 and B31; contrary to this expectation, the 2009 excavations demonstrate that entry to the raised acropolis was not achieved from its southern side and was, instead, apparently gained from the platform's sides.

The Northeast Acropolis was selected for investigation for several reasons. First, based on previous excavation of stone buildings elsewhere in the epicenter, investigation of the sizeable range/palace buildings on the northern (Structure B33) and western (Structure B32) sides of this complex was likely to be associated with Terminal Classic *in situ* refuse. Second, excavation of Structure B34, the ancestral temple of the Northeast Acropolis, in 1994 and 1995 recovered a series of deposits ranging from the Late Preclassic (A. Chase and D. Chase 2005b) through the Terminal Classic Periods (A. Chase and D. Chase 2007), indicating that the group had a long occupation history and was occupied until the final abandonment of the site; thus, late remains could be expected. However, the fact that no late royal tombs were recovered in the ancestral shrine for the Northeast Acropolis (unlike the Central Acropolis and Caana) suggested that excavations in this complex would supplement our understanding of non-royal elite variability at Caracol. Third, the excavations undertaken in 1994 and 1995 indicated that a massive construction effort had raised the Northeast Acropolis plaza over 2 m in the late Late Classic to Terminal Classic Periods, indicating a substantial interest in this complex at that time. Finally, it was thought possible that excavations in the Northeast Acropolis could recover hieroglyphic texts that could shed light on the Late to Terminal Classic history of Caracol; stucco texts were recovered in association with buildings on both Caana (Grube 1994) to its west and on Structure B64 (bottom link in 1994-96 season report at [www.caracol.org](http://www.caracol.org)) to its east.

### **Structure B33**

Structure B33 is the most massive construction of the Northeast Acropolis (Figure 5). The interior rear floor of the latest building is situated some 5.4 m above the latest plaza floor and the terrace in front of the summit construction rose 4.8 m above this same plaza surface. The final building that occupied the summit of Structure B33 measured 7.8 m in depth by an estimated 37.2 m in length and consisted of a total of 8 rooms. The stone base-walls for this construction were presumably surmounted by a wooden building and roof; no vault stones were recovered in the excavation. At each end of this palace, two transverse rooms were set – one looking west towards Caana and the other looking east towards the C Group. Each of the excavated transverse rooms measured 2.0 m in depth. The innermost western transverse room had an infilled and elevated floor that raised this surface 0.4 m above the underlying floor that formed the surface for the central front room; a 1.5 m deep bench was set against the rear wall of the outermost western transverse room. When viewed from the south, Structure B33 would have revealed a façade with three doorways that all accessed the same front room. Three other interior doorways penetrated the rear wall of this central room, entering three separate rear rooms. The eastern central rear room was excavated and produced a small inner portico and that was fronted by a solid raised bench on its



eastern, northern, and southern side; the stonework evident in the sides of the benches was truly monolithic. Half of the central rear room was excavated during the 2009 field season; this 2.3 m deep chamber revealed a central bench set against the rear wall; the bench rose 0.73 m above the floor on which it had been built, but only 0.4 m above the floor with which it was finally associated; its final form would have measured some 5.0 m in width by 1.7 m in depth. An opposing L-shaped bench dominated the eastern side of the central rear room.

While the latest palace on the summit of Structure B33 was used and modified during the Terminal Classic Period, portions of this building must date to the Early Classic Period. An Early Classic tomb was found in the doorway area immediately below the summit floor associated with the building's inner door jambs, possibly indicating that the medial wall of the structure in this locus was of Early Classic date. However, the front room of the palace constituted a Terminal Classic addition as did the transverse rooms on the western side of the summit. These construction efforts may have been accompanied the late building activity that raised the Northeast Acropolis plaza by over 2.0 m at approximately the same time. The stratigraphy from the Structure B33 locus makes it clear that the edifice had already achieved its present height in the Early Classic Period; as such, it would have been a much more impressive building than its Terminal Classic counterpart, when it was fronted by a much lower plaza level.

**Operation C181B** (Figures 6, 7, and 8) consisted of an axial trench to Structure B33 and the excavation of the interior of the eastern portion of the central rooms of the palace. The trench measured 16.3 m north-south by 2.0 m east-west and the interior front room extended 10.25 m east of the eastern interior doorjamb and was 2.1 m wide. Besides exposing the outlines of the Terminal Classic building and its frontal platform, Operation C181B was recovered *in situ* floor refuse and significant Early Classic construction activity, including a tomb. Terminal Classic ceramic and artifactual remains were encountered in the original trench on axis to the building (Figures 9, 10, and 11) and included pieces of five vessels. In the central portion of the front room, against the step-up for the interior stair were found an olla (Figure 10a), a footed cylinder (Figures 10b), a small jar (Figure 10e), and a pyrite mirror piece (Figure 11j); positioned against the inner step and the western jamb were portions of a burner (10f), the remainder of which is probably within the unexcavated portion of the room. Approximately 2 m into the eastern front room a ceramic spouted jar (Figure 10d) and a large lithic (Figure 11d) were encountered on the floor. Pieces of another footed cylinder (Figure 10g) were found on the front terrace and part of a late modeled barrel (Figure 10c) and figurine (Figure 11i) were found on the front slope of Structure B33 in the trench. Also located on the front summit terrace were pieces of burnt shell (Figure 11e-h), probably part of the same artifact, and a badly burnt and shattered large biface (Figure 11c). On top of the L-shaped bench in the inner central room (Figure 12), the remains of a mirror were recovered, based on the recovery of multiple pieces of a worked slate backing (Figure 13a-e) and four pyrite mirror pieces (Figure 13f-i).

Penetration of the core of Structure B33-1<sup>st</sup> yielded deeply buried architectural remains (Figures 14, 15, and 16), all dating to the Early Classic Period, based on sherd material from within sealed fill (Figures 19 and 20). The upper stairway for the latest building was not preserved, but this stair was set approximately 2 m above a ripped-out earlier summit stair. Half-way down the southern slope of Structure B33, the basal course of what must have been a stair balk was recovered with an associated floor. The materials in the fill overlying the earlier steps at the summit of Structure B33 consisted of mixed sherd material dating from the Preclassic through the late Late Classic, 3 partial green obsidian blades, and several chert artifacts (Figure 11a and 11b). Excavations at the base of Structure B33 found an exceedingly disturbed late stair. The limestone that made up this stair was extremely soft and had largely disintegrated; yet, vertical stones were evident in the section, indicating three possible latest steps, only the lowest of which could be recorded (Figure 14). As with the steps deep under the summit fill, the earlier steps at the base of the substructure had been largely removed, but were still very much in evidence (Figure 17). As with the plaza fill excavated in 1994 and 1995, the dirt fill over these ripped out steps was full of refuse. The majority of the pottery refuse that was situated directly over the ripped-out earlier steps dated to the late Late Classic and Terminal Classic Periods (Figures 21 and 22); other artifactual garbage was also well represented (Figure 23). Excavation into the core of the deeply buried ripped-out steps produced only material dating to the Early Classic Period (Figure 20).

The buried architectural remains on the summit of Structure B33 were also penetrated to the south of the tomb, revealing a complicated construction sequence (Figure 18). The Early Classic tomb had been placed behind a slight step that was appropriately placed to form an exterior plinth for the medial building wall. This step was abutted on its south side by a floor that extended 2.4 m to the south where it turned down over a 0.7 m high stair-balk. This stair-balk in turn was set 0.6 m in front of an earlier stair-balk. This earlier stair-balk was abutted by a floor that ran for 2.8 m and articulated with the upper course of the buried earlier steps in the summit of Structure B33; the fill beneath these constructions contained more dirt than stone. Penetration of these surfaces and that fill, all of which must have dated to the Early Classic Period, in turn revealed at least two earlier stages of construction activity, associated with ripped-out steps and floors. In one of the ripped-out floors, a circular pit (Figure 16) was uncovered that had been dug through the floor to a depth of some 0.5 m; as it was sealed by upper floors, the pit must have been intentional and its contents were either perishable or were robbed in antiquity. The earliest construction at this locus was comprised of a fill of large soft limestone blocks. There are undoubtedly other constructions buried deep within Structure B33, probably of Late Preclassic date.

**S.D. C181B-1** (Figures 24, 25, 26, and 27) was assigned for an Early Classic tomb that was located on axis to Structure B33 directly beneath the central rear doorway area. While the western central door jamb was not located over the tomb, the eastern central jamb was directly over the tomb's capstones. The tomb was sealed by the same floor that was associated with the door-jambs and upon which the central rear bench rested. The chamber had been dug into a pre-existing structure and its northern, eastern, and, western walls consisted only of the cut fill; the southern wall was more formally constructed of stone. It is suspected that the interior of the chamber may have once been plastered, but that this thin surface did not survive the ravages of time. The roughly oval chamber that was created in the fill of the earlier building measured 1.55 m in height by 0.95 m in width and 2.05 m in length (Figure 25). The chamber contained the disintegrated remains of a single adult individual with head to the east. The teeth show evidence of tartar; no hypoplasia is present. Three pyrite inlays were also present in the teeth, all located in premolars (both upper and lower). The bones were extremely poorly preserved meaning that no definitive sex identification is possible; however, as the recovered bones are relatively slight, and given the jewelry that was present, it is suspected that the individual may have been female. Areas of red cinnabar could be detected on the floor of the chamber in the area of the skull and the feet. Four ceramic vessels were included in the interment, all located in the vicinity of the feet and legs; these consisted of a polychrome basal-flanged bowl (Figures 29a and 30), a dark brown pedestalled bowl (Figure 29c), a dark brown spouted bowl (Figure 29d), and an unslipped cup (Figure 29b). The cup was located within the pedestalled bowl. The polychrome bowl portrays a hummingbird on its interior and evinces two human portraits on its exterior wall (Figure 30). Two large spondylus shells (Figures 31a and 31b) were located to either side of where the head had once been. The individual had also worn a spondylus shell necklace, consisting of 54 beads (Figure 28 and 31c-dd). One other shell disk (Figure 31ee) was also recovered in the vicinity of the head. Three small pyrite mirror fragments were recovered south of the left arm and may indicate that a mirror had once been present in the tomb.

**Operation C181C** and **Operation C181D** (Figures 32, 33, and 34) both investigated the western portion of the palace on the summit of Structure B33. Operation C181C was located 6.5 m west of Operation C181B and encompassed both the western part of the interior front room for the palace and half of the two transverse rooms at the western end of the building; the excavation measured 4.4 m north-south by 9.9 m east west. Operation C181D was originally designated to encompass a looters' pit into the southern wall of the structure, but was extended to include all materials to the south of this wall, as well as a 1.2 m excavation extension to the west and a 2.0 m by 2.0 m excavation south to the summit edge. The westernmost outer wall was not present, having collapsed over the edge of the substructure. The excavations indicated that the inner doorway to the interior transverse room must have been offset to the north, possibly to better highlight the rear bench in the outer transverse room, which would have been centrally accessed. The fill within the walls consisted of finely powdered bedrock, which did not do a good job of providing the necessary binder for long-term preservation; the eastern wall of the inner transverse room had collapsed west over the interior floor of the building. Two floor levels were encountered south of the transverse building wall, in the area disturbed by the looters. The lower floor level was consistent

with the surface levels elsewhere in Structure B33; the upper level was approximately 0.5 m above this floor and possibly indicates the existence of an exterior bench to the building, similar to the jaguar throne noted to the west of the Structure B19-1<sup>st</sup> stairway. However, trees, looting, and slope had caused the almost complete disruption of whatever this feature once was. The floor of the front central room for Structure B33 was heavily burned and a carbon sample was taken for future radiocarbon dating. That this portion of Structure B33 was constructed and used in the Terminal Classic Period can be established by the context of the ceramics recovered here. Portions of a censer (Figure 35a) were recovered from within the bedrock fill of the rear transverse wall. Pieces of a flat-based Belize Red plate (Figure 35d) were recovered on the floor of the inner transverse room and late ceramic materials (Figure 35b and 35c) were recovered from the fill of the elevated floor in the inner transverse room.

### **Structure B32**

From its surface configuration, Structure B32 appeared to be a range building situated on the western edge of the Northeast Acropolis plaza (Figures 36 and 37). Upon excavation, the substructure for Structure B32 measured 23.7 m north-south; its east-width width can be estimated to be slightly less than 11.0 m. No indications were found that the substructure was surmounted by a formally constructed stone building. Instead, the edifice that graced the multi-level summit was probably perishable. The interior rear floor for Structure B32 rose approximately 2.25 m above the plaza floor for the Northeast Acropolis. The building itself was minimally bi-level; the rear of the construction has collapsed and the exact dimension are problematic. What remains of the building consists of a lower eastern surface 1.25 m broad and a higher western surface 2.1 m broad; each of these levels rose approximately 40 cm above the associated floors. This rear bi-level construction was in turn fronted by a 2.3 m wide terrace, the upper portions of which formed the fourth, and uppermost, step for an 8.5 m wide stairway that protruded into the Northeast Acropolis plaza. Extensive burning was found on the plaza floor to either side of this stairway and along the front terrace walls.

**Operation C182B** (Figures 39 and 40) was an axial trench into Structure B32. The excavation measured 11.9 m east-west by 2.5 m north-south (except for a 2 m wide section in the plaza); materials overlaying the front step area included a Sahcaba Modeled-Carved sherd (Figure 47j), part of a colander (Figure 47i), and pieces from a large olla (Figure 46d). Deeper penetration was made only in a 2.0 m by 2.0 m area tangent to the northern section and set behind the initial summit step (Figure 38). This deeper penetration revealed that the core of Structure B32 consisted of a packed dirt matrix that was similar to that recovered from other plaza excavations, such as those in front of Structures B33 and B34; as in these other deep excavations, this dirt fill contained refuse (Figure 47a, c-e) and pottery (Figure 46c) that dated from the Late Preclassic through the late Late Classic and Terminal Classic Periods. However, whereas the deeper excavations in Structures B33 and B34 found earlier architectural features, none were recovered in the Structure B32 excavations. Instead, it would appear that Structure B32 was constructed at the same time and as part of the same effort as the final plaza elevation for the Northeast Acropolis. This implies that a massive construction effort was undertaken in the Northeast Acropolis in the early portion of the Terminal Classic Period, presumably in the early 9<sup>th</sup> century A.D. As Late Classic Period deposits were recovered within earlier constructions in Structure B34, it can also be deduced that the platform for the Northeast Acropolis was extended to the west during this late construction effort and that the remains of any earlier western buildings are presumably buried under the present plaza surface.

**Operation C182C** (Figures 41, 42, and 43) was set 1.4 m north of Operation C182B and originally measured 5 m north-south by 5.5 m east-west; a later extension to the north, measuring 3.0 m east-west by 5.1 m north-south, resulted in an excavation that was 10.1 m in length and that exposed the entire northeastern facing of Structure B32. Heavy burning was noted for the entire floor along the terrace wall and samples were taken for future radiocarbon dating. Ceramic artifactual materials recovered during the clearing of this part of Structure B32 included a modeled dog's head (Figure 47l), a drilled sherd (Figure 47g), and an eye from a modeled vessel (Figure 47k).

**Operation C182D** (Figures 44 and 45) was placed 0.9 m south of Operation C182B and exposed the southeastern portion of Structure B32; the excavation measured 3.8 m east-west by 9.4 m north-south, at which point the excavation merged with Operation C183F. As in Operation C182C, extensive burning was again recorded for the floors that abutted the terrace facing. Portions of three pottery vessels were

recovered during the clearing of this area, two small bowls (Figures 46a and 46b) and one large bowl (Figure 46e) located near the southeast corner. The small, presumably footed, bowl is similar to others recovered in association with Structures A6 and B64; the other bowl is similar to burial vessels found in a residential group adjacent to the Conchita Terminus and in a residential group a kilometer northeast of the Puchituk Terminus. Artifactual materials from this excavation included a partial green obsidian blade (Figure 47b), a broken biface (Figure 47f), and numerous stone fragments that appeared to come from the same metate.

### **Structure B31**

Architecturally, Operations C183E and C183F showed that Structure B31 measured approximately 17 m in length (Figures 48 and 53). Extrapolating from Structure B30, Structure B31 was probably approximately 5.5 m broad. While it is unlikely that a stone construction graced the summit of Structure B31, the two excavations undertaken on the front of this building revealed substantial architectural detail. The lower platform of this construction contained two inset terraced areas with elevated borders set amid what must have been three elevated balks or benches. The central bench would have measured 3.2 m across its front and been 1.50 m deep; the benches marking the extent of the front terrace would have been 2.1 m wide and 1.5 m deep. The precise function of these architectural features is not known, but it is likely that they would have been covered by a perishable roof given the dimensions and form of Structure B31.

**Operation C183E** (Figures 49 and 50) was set over the mid-section of Structure B31 and measured 4.5 m north-south by 3.5 m east-west. The investigation succeeded in finding architectural features associated with the lower terrace of Structure B31; the eastern side of the front terrace in this excavation formed a lower area that was set against a higher western balk or bench. Apart from a burnt olive shell and some broken chert tools (Figure 52, the only diagnostic ceramic materials associated with this excavation included a composite lipped bowl (Figure 51b) and a possible piece of Daylight Orange: Darknight Variety (Figure 51d).

**Operation C183F** (Figures 54 and 55) was placed 2.0 m west of Operation C183E and exposed the entire front terrace of Structure B31, as well as portions of its elevated summit. The excavation measured 4.5 m north-south by 8.6 m east-west and merged with the areal clearing undertaken in Operation C182D, exposing the southern facing for Structure D32. A southwestern excavation extension, measuring 2.4 m by 0.5 m, exposed a plinth on the building's western extent. Based on surface topography, it is also possible that a short stairway accessed the Northeast Acropolis west of Structure B31 and east of a small platform situated on the southwestern corner of the Northeast Acropolis. Artifactual materials recovered from this investigation included a partial olla with wavy incision at its neck (Figure 51a), three ceramic figurine fragments (Figure 56d, 56f and 56h), a pyrite mirror piece (Figure 56e), part of a marine shell (Figure 56g), and several chert tools (Figure 56a-56c).

### **Structure B30**

Structure B30 was only cursorily investigated during the 2009 field season. Its western extent was revealed in Operation C183D. Operation C183C demonstrated that access to this construction would not have been possible from its southern side. Operation C183H showed that there was an alleyway south of the edifice and that another building that faced south may have been located at the southeastern corner of the Northeast Acropolis. The data from Operation C183D and surface features indicate that Structure B30 may have been 1.0 to 2.0 m longer than Structure B31 and had a width of approximately 5.5 m.

**Operation C183C** (Figures 57, 58, and 59) was designed to find the southern wall of Structure B30. The excavation measured 3.0 m north-south by 2.0 m east west. It was set over the rear slope of Structure B30 and extended south to the edge of the platform that comprised the top of the Northeast Acropolis. While no clear-cut facing was found that would have formed the southern wall for Structure B30, a northern facing was located at the edge of the platform that was abutted by a plaster floor. Although only one course in height, this facing may represent the rear wall of a construction that at one time overlooked the large plaza between the Northeast Acropolis and Barrio; alternatively, it may simply be a formal border for the alleyway behind Structure B30; work during the 2010 field season should answer this question. A partial Belize Red tripod plate

(Figure 46c) was recovered in this excavation. Two interesting artifacts were also recovered from the floor near the southern facing: one was a *spondylus* bead (Figure 60a) and the other was a small chert point (Figure 60b). Elsewhere in the Maya area, these small chert points are thought to be indicative of the use of the bow-and-arrow (Shafer and Hester 1988) and they are also often taken to be Postclassic in date. However, it appears that this point – and several others at Caracol – date to the Terminal Classic Period, something also noted for similar points from Tikal, Guatemala (Moholy-Nagy 2008:14). The specimen from Operation C183C is the third one of these points known from Caracol; another small point was found at the base of Caana and the third small point was recovered from within a residential tomb 1.2 km south of the epicenter.

**Operation C183D** (Figures 61, 62, and 63) was an excavation measuring 10.25 m north-south by 2.0 m east-west. It was set in a depressed area between Structures B30 and B31 and was designed to find the central access to the Northeast Acropolis. Instead, the investigation found the western extension of Structure B30 and demonstrated that there was no central access to the Northeast Acropolis plaza from the southern side of the platform. Artifactual materials recovered from within this excavation included an large incurved bowl (Figure 46d) and a number of chert tools (Figure 64). The space between Structures B30 and B31 appears to have been less than 1.0 m in width and does not appear to have been designed to provide entry to the Northeast Acropolis. Thus, there was no central access to the Northeast Acropolis on its southern side, which is very unusual given its articulation with the large southern plaza that was also fronted by Barrio. Structures B30 and B31 both faced north; their rear walls would have shielded the interior plaza of the Northeast Acropolis from being viewed from the south. These two buildings were clearly situated so as to provide an aspect of privacy to the inhabitants of the Northeast Acropolis. Thus, the architectural constructions indicate that the Northeast Acropolis would have been a very private area.

**Operation C183H** (Figures 65, 66, and 67) was not actually set over Structure B30, but instead bounded the southeast corner of this structure. Operation C183H encompassed both an original trench that measured 2.0 m east-west by 6.8 m north-south and an additional areal excavation 4.0 m in width (north-south) by 6.0 m in length that straddled a 1.4 m wide wall that was uncovered within the original trench (and that ran to the west). This wall had remnants of an interior floor on its southern side, presumably from a formal room; however, the southern wall for this room had collapsed in antiquity. However, this construction apparently served as the rear wall for a formal building that had been situated above the large southern plaza between Barrio and the Northeast Acropolis. The wall had more courses on its northern side and also evinced a plinth; with the plinth, the northern side was set at a slightly deeper level than the southern facing for the wall. Besides being the rear wall of a southern facing building, this same feature also formed the southern side of an alleyway running to the west behind Structure B30. Indeed, this facing may eventually prove to be linked to the facing that was recovered in Operation C183C; however, alleyway steps should exist if this was in fact the case. No formally constructed step-up onto the plaza surface of the Northeast Acropolis was recovered in Operation C183H, although it is suspected that one existed. Ceramic materials from this excavation included Terminal Classic sherds (Figure 68 and 68c). Artifactual materials included the usual chert tools (Figure 69d-69f), part of a limestone barkbeater (Figure 69a) and an elaborately carved burnt bone portraying a human face (Figure 69c).

### **Acropolis Platform Base**

The acropolis upon which the Northeast Acropolis was situated rose approximately 5 m above the broad plaza to its south and defined the entire northern extent of the plaza. Two excavations were therefore placed against the base of the acropolis so that central stairs could be located that would have led upwards from the plaza to the acropolis summit; neither excavation appears to have found any evidence for such features. Instead, it would appear that the Northeast Acropolis was not formally accessed from this plaza and that its access must have been from its sides.

**Operation C183B** (Figures 70, 71, and 72) was set at the rise of the acropolis platform and was designed to find any basal architectural features. The excavation measured 2.0 m east-west by 3.8 m north-south. While two facings were located within the investigation, the construction core to the north indicated that no stairway was possible in this location. Artifactual materials recovered in Operation C183B included one worked

bone and a number of worked chert tools (Figure 73).

**Operation C183G** (Figures 74, 75, and 76) was placed 9.9 m east of Operation C183B and was also designed to search for basal architectural features. Like Operation C183B, Operation C183G also measured 2.0 m east-west by 3.8 m north-south. Unlike its sister operation, Operation C183G did not recover any definitive facings nor any indication that a stair could have existed at this locus. Artifactual materials recovered in this excavation included a circular shaped ceramic, a large chert tool, and a ceramic censer appliqué (Figure 77).

### **Summary of Northeast Acropolis**

The Northeast Acropolis was occupied from the Late Preclassic through the Terminal Classic Periods. The 2009 investigations of this complex demonstrated several things. First, the massive core of Structure B33 was constructed by the Early Classic Period and was then extensively modified during the Terminal Classic Period. It in fact appears that Terminal Classic peoples directly reused at least part of an Early Classic stone building and that they incorporated earlier walls from this structure into an extensive Terminal Classic palace. Second, Structure B32 was a single phase construction effort that was undertaken at the same time that the plaza surface at the summit of the Northeast Acropolis was raised over 2.0 m in height; the dirt fill that formed the hearting for this building was the same matrix as that used to build up the plaza. Third, late Late Classic and Terminal Classic refuse was directly deposited on top of ripped-out Early Classic constructions before and as the plaza was elevated. Fourth, as a result of the late construction efforts, the Northeast Acropolis became a very private plaza; only people on the summit of Caana would have had a view into the Northeast Acropolis plaza; no direct access or view was possible from the south side of the platform; entry may have only been possible from the southeast and southwest corners of the Northeast Acropolis, indicating that access would have been very controlled. Fifth, burials recovered during the 1994 excavation of Structure B34 indicate that this building received late Late Classic and Terminal Classic interments, indicating that the people who resided in the Northeast Acropolis at this time participated in traditional Caracol burials patterns and were presumably local elites. Finally, the earlier Late Classic form of the Northeast Acropolis was completely obscured by the Terminal Classic modifications. It is suspected that excavations within the central plaza would yield buried constructions of this date on the western and southern sides of the Northeast Acropolis.

### **Culebras Residential Group**

The Culebras Residential Group (Figure 78) is located to the southeast of the South Acropolis on the eastern side of the Pajaro-Ramonal Causeway. The group straddles a set of terraces on a hillside that leads up to the Caracol epicenter. This residential group was one of the primary foci for excavation during the 2008 field season and a report of these archaeological investigations is available on the internet ([www.caracol.org](http://www.caracol.org)).

### **Structure C20**

Structure C20 is the northernmost of two eastern shrines associated with the Culebras Residential Group. During the 2008 field season, this building was penetrated by an axial trench and produced a number of special deposits. One special deposit, a rear chamber, was not excavated during 2008, but was rather backfilled so that it could be investigated during the 2009 field season.

**Operation C179B** and **Operation C179H** were both used during the 2009 field season. Operation C179B (Figure 79) was an axial trench on Structure C20 that was excavated during the 2008 field season. Seven special deposits were encountered in this trench, including the capstones for a large open air chamber at the eastern end of the excavation. Because of the size of the tomb and the fact that the chamber was recovered toward the end of the 2008 field season, it was not excavated and was, instead, backfilled intact so that it could be properly exposed in the future. At the beginning of the 2009 field season, the eastern 1.5 meters of Operation C179B was reopened to re-expose the capstones over the chamber. Upon entering the tomb, it was determined that the structural fill had shifted to the point that complete excavation of the chamber could cause a collapse. In order to ensure that conditions were safe for the excavation, a southern extension was made directly over the chamber and its capstones. This extension was labeled Operation C179H and measured 2.2 m north-south by 1.5 m east-west (Figure 80). Below the humus, the

disturbed remnants of the interior rear wall for Structure C20 were recovered in association with pieces of the last interior floor of the building. Beneath this latest flooring, the capstones for the chamber were found 55 to 65 cm below ground surface, as were pieces of an earlier floor that was presumably cut to construct this chamber. The extension also exposed an entryway for the tomb on its south side that consisted of a narrow passage and steps; this entryway had been sealed within the fill of the last construction effort associated with Structure C20.

Also within the fill for the latest version of Structure C20, and sealed by the latest floor, was a smashed concentration of ceramic sherds that was precisely centered on the tomb axis. These ceramic materials were located approximately 12-20 cm above the capstones for the chamber. Although not in specific order in the ground, when reconstructed in the laboratory, they formed half of a ring-based dish; the other half of this dish was recovered from the floor of the chamber (Figure 85m), sealed under other pottery vessels to the side of the bench. Thus, the interment of half of the vessel above and a half of the vessel within the tomb was purposeful. This fortuitous find is also relevant to other burial practices recorded from Caracol. Partial vessels are occasionally recovered within tombs (A. Chase 1994), leading to questions about their purpose and origin. Were they accidentally included in the chamber? Had the other part of the vessel been purposefully removed? Had a ceremony been carried out somewhere else and only part of that ceremony placed in the chamber? The C179H/C179B vessel indicates the purposeful use of a single vessel relative to the construction and consecration of an interment chamber. Complete vessels have been noted in a number of cases as occurring within fill above Caracol's tombs; in some cases, single vessels were complete and *in situ*, smashed above capstones; in other cases, one or more reconstructable vessels were broken and included haphazardly in fill above a chamber (A. Chase and D. Chase 1987); in still other cases, complete censers and vessels were placed on floors directly above interments. Thus, while we may perceive single contexts archaeologically, the ancient Maya used material culture to ritually interrelate multiple contexts.

**S.D. C179B-7** (Figures 81, 82, 83 and 84) was assigned for the contents of the chamber uncovered in the rear of Structure C20. The chamber contained an L-shaped bench with a lower alley in the northwestern corner. The chamber measured roughly 2.1 m north-south by 1.15 m east-west; it was 1.0 m from the upper bench surface to the bottom of the capstone. The alleyway measured 1.5 m in length by 0.3 m in width by 0.2 m in depth. The entryway was 0.5 m wide and ran along the eastern side of the chamber; two steps led down to the bench surface. Thirty centimeters of dirt covered the vessels and bones that were set on the broad bench; several ceramic vessels were intact and upright. Skeletal remains were distributed throughout the chamber and none were clearly articulated. The skeletal remains were very fragmentary, although all the remains appear to have been from adults. No sex identifications are possible, although one of the pelvises may be female. Based on lower premolars, 7 individuals were present in the interment, matching the 6 skull concentrations and one mandible noted by the excavator. Most of the individuals in this interment had evidence of substantial tartar, although several also had caries. The teeth of one individual had hypoplasia; those from two other individuals had evidence of having been filed; and, one other individual displayed pyrite inlays in both lower left premolars. Including the vessel (Figure 85m) found both above and within the chamber, sixteen pottery vessels were recovered from within the tomb. Four are footed plates (Figure 85i-85l); four are ring-base dishes (Figure 85m-85p); four were cylinders (Figure 85a, 85c, 85g, and 85h); two were bowls (Figure 85e and 85f); and two were pedestalled "brandy snifters" (Figure 85b and 85d). One of the cylinders evinces dark brown designs on a buff background (Figure 85c); it is similar to other cylinders noted from Tayasal in the Peten (A. Chase and D. Chase 1983: 145) and, more recently, from the vicinity of Cancuen (based on photographs of that site's ceramics). Another polychrome cylinder evinced three human figures and an eroded band of hieroglyphs (Figures 85h and 86). The central figure dwarfs his two attendants and is probably seated on a throne; his elaborate headdress is splayed over more than half of the cylinder. The brown modeled-carved cylinder (Figure 85a and 87) is perhaps the most unusual ceramic piece. This vessel portrays the Sun God with a jaguar headdress within a shell cartouche. The shell cartouche is framed to the left by a corporeal serpent from whose mouth emerges God K with a water-lily headdress. To the right of the shell cartouche, facing the God K serpent, is a skeletalized serpent from whose mouth a foliated gourd emerges. This modeled-carved cylinder is similar stylistically to three other recorded



vessels, none of them from known context. Justin Kerr ([www.famsi.org](http://www.famsi.org)) has posted photographs of two cylinders (K2292 and K8242) and one bowl (K8257) that contain imagery and texts that closely resemble the Caracol vessel. The head of the sun god on one of these vessels (K2292; Kerr 1990:230) is almost an exact duplicate to imagery shown on the Caracol vessel. The origins of this style cannot be determined at this time, but this style dates to the Late Classic Period and is antecedent to the later modeled-carved vessels that appear during the Terminal Classic (albeit with more warlike imagery). A large number of small artifacts were also recovered from within the S.D. C179B-7 chamber. One of the ring-based dishes (Figure 85n) contained: 8 partial obsidian blades (Figure 88a-88h); 4 bone needles (Figure 88v-88y); 1 bone “bead” (Figure 88i); 1 burnt bone fragment (Figure 88j); 10 worked shell objects (Figure 88k, 88l, and 88n-88u), 1 chert flake (Figure 88m), 3 olive shells (Figure 88aa-88cc), and 1 river snail (Figure 88z). Other materials recovered from within the tomb included: 18 fragmentary obsidian blades (Figure 89a-r); 1 obsidian core fragment (Figure 89u); 1 green obsidian point tip (Figure 89v); 10 chert tools (Figure 89s, 89t, 89w-89dd); 1 jadeite bead (Figure 90o); 1 spindle whorl (Figure 90m); 1 hematite inlaid labret (Figures 90j and 91); 1 bone awl (Figure 90n); 2 bone pins/needles (Figure 90a and 90e); 9 other pieces of worked bone (Figure 90b-90i, 90k, and 90l); 1 shell adornment (Figure 90r), 3 marine shells (Figure 90p, 90s, and 90z), 1 pomacia shell (Figure 90q), 6 riverine shells (Figure 90t-90y); and, 1 worked stone (Figure 90aa).

The excavation of S.D. C179B-7 during the 2009 field season yielded a substantial tomb containing items that date to the late Late Classic Period. Given the seven individuals interred within the chamber, the 16 vessels indicate an adherence to typical patterns regarding numbers and kinds of vessels that accompanied the dead; while normally one cylinder, one plate, and perhaps one bowl, there was clearly some flexibility in these pairings. The materials within this chamber are also significant because they demonstrate that the inhabitants of the Culebras residential group had access to a multitude of items, some of them tradewares from outside the Caracol area. The artifacts from within the chamber also suggest that the inhabitants of this group minimally worked (spindle whorl), wove (bone awl), and sewed (needles and pins) cloth. The Culebras excavations provide an excellent example of the material remains that can be associated with the inhabitants of a non-elite Caracol residential group.

### **Significance**

The 2009 field season was significant for a number of reasons. First, the Structure C20 tomb added to our understanding of ancient Maya ritual behavior at the site by archaeologically demonstrating the unity between materials overlaying a chamber with those within the chamber. Second, the LiDAR data from Caracol produced accurate imagery of 200 square kilometers of Caracol’s ancient landscape modifications and architectural constructions, potentially revolutionizing settlement archaeology within the Maya area. Finally, the investigations begun in the Northeast Acropolis of Caracol during the 2009 field season are particularly important to understanding Terminal Classic variability in coeval Maya material culture and in identifying changes that immediately preceded the Classic Maya Collapse. Upon the conclusion of the 2010 field season, the excavations in the vicinity of the Northeast Acropolis should help elucidate late burial ritual, craft specialization, and the special role that this architectural complex played within the Caracol site core. Investigations in the F33/F39 Complex in 2010 and 2011 will provide comparative material and aid in defining the latest occupation, ritual patterns, and ultimate abandonment of Caracol. Previous research at Caracol suggests that some of the answers to the Maya collapse lay in understanding the internal dynamics of Maya socio-political and economic structures and the changes in these dynamics between the Late and Terminal Classic Period. Thus, the research that is being undertaken from 2009 through 2011 should ultimately have implications for wider interpretations of the Classic Maya Collapse.

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**TABLE 1:**  
  
**Caracol Project Members: 2009 Field Season**

<b>Staff:</b>		
<b>Directors:</b>	Arlen F. Chase	C1
	Diane Z. Chase	C2
<b>Lab and Field Directors:</b>	Maureen Carpenter	C56
	Amy Morris	C111
<b>Senior Field Supervisors:</b>	James Crandall	C170
	Amanda Groff	C150
	Lucas Johnson	C134
<b>Field Supervisors:</b>		
	Lisa Lomitola	C183
<b>Field Assistants:</b>	Kelin Flanagan	C185
	Joshua Foster	C186
	Patsy Holden	C187
	Alexander Rivas	C188
	Vincent Scarcella	C189
<b>Biological Program:</b>		
	Jessica Hightower	C191
<b>Belizean Labor:</b>		
<b>Kitchen:</b>	Angelica Meneses	
	Linda Aurora Meneses	
	Mirna Beatriz Meneses	
<b>Field:</b>		
	Alvaro Ruben Aldana	
	Jorge Alberto Aldana	
	Abelino Rafael Castellanos	
	Carlos Cocom	
	Reynaldo Cunil	
	Roberto Cunil	
	Saul Galeano	
	Jaime Rene Iglesias	
	Robert Carlos Lopes	
	Carlos Ivan Mendes	
	Gabriel Meneses	
	Asterio Morales	
	Aparacio Moro	
	Jose Luis Uck	
	Jose Victor Vasquez	

**Figures**  
  
 Cover: Ceramic modeled-carved cylinder from S.D. C179B-7.  
  
[Figure 1:](#) LiDAR 200 sq km DEM and the Caracol causeway system.

- [Figure 2:](#) LiDAR image of epicentral Caracol and southern settlement and terraces between the Retiro and Pajaro-Ramonal Causeways.
- [Figure 3:](#) Map of Caracol epicenter showing details of the original map of the Northeast Acropolis and the F30-F42 residential group.
- [Figure 4:](#) Plan of the Northeast Acropolis, showing the locations of the 2009 investigations.
- [Figure 5:](#) Photograph of Structure B33 showing the axial trench in Operation C181B.
- [Figure 6:](#) Structure B33 axial section (Operation C181B).
- [Figure 7:](#) Photograph of eastern portion of areal excavation in Operation C181B.
- [Figure 8:](#) Plan of Structure B33, as revealed in Operation C181B.
- [Figure 9:](#) Plan of *in situ* sherds that formed a reconstructable vessel (Figure 11e) in front of the step-up to the rear central room in Structure B33.
- [Figure 10:](#) Ceramic vessels associated with the summit floor of Structure B33: a. Valentin Unslipped; b. eroded Zacatel Cream Polychrome; c. Monica Plano-Relief; d. possibly San Julio Modeled; f. Monterey Modeled; g. Cohune Composite.
- [Figure 11:](#) Artifactual materials associated with the summit of Structure B33: a. chert biface; b. chert drill; c. large burnt chert biface; d. limestone blank; e.-h. burnt shell; i. ceramic figurine fragment; j. pyrite mirror piece.
- [Figure 12:](#) Photograph of L-shaped bench in Structure B33's central rear room (Operation C181B).
- [Figure 13:](#) Artifactual materials from the surface of the L-shaped bench in the rear central room of Structure B33: a.-e. worked slate pieces (probably all from the same mirror back); f.-i. pyrite mirror pieces.
- [Figure 14:](#) Plan of the upper step (late Late Classic or later) and the lower steps (Early Classic) in the southern part of the Structure B33 axial trench (Operation C181B).
- [Figure 15:](#) Plan of the deeply buried earlier steps and the later stair balk in the central part of the Structure B33 axial trench (Operation C181B).
- [Figure 16:](#) Plans associated with the summit excavation of the axial trench through Structure B33: upper plan of rear bench, jambs and steps associated with the central rear room and of the capstones over S.D. C181B-1; lower plan of the two southern balks, buried and cut floors, and an upper step in front of the central room; detail of an empty pit through one of the deeper floors.
- [Figure 17:](#) Photograph of the lower buried steps (Early Classic) in the eastern extent of the axial trench through Structure B33.
- [Figure 18:](#) Photograph of deeper constructions buried beneath the last floor for Structure B33; inner balk is visible; the later balk is visible in section; deeper cut shows softer dirt fill in an area of architectural disturbance.
- [Figure 19:](#) Ceramic sherd material from within the fill of the lower buried steps (Early Classic) in the eastern

extent of the axial trench through Structure B33: a., b., d., e. Quintal Unslipped; c. Candelario Appliqued; f. unnamed dichrome; g., h. Dos Arroyos Orange-Polychrome.

[Figure 20:](#) Ceramic sherd material from within the fill sealed behind the second balk in the axial trench (Early Classic): a. Dos Hermanos Red; b. probably Quintal Unslipped.

[Figure 21:](#) Ceramic material from above the deeply buried steps to the front of the stair balk in the eastern part of the axial trench for Structure B33: a. Zacatel Cream-Polychrome; b. probably Cambio < Unslipped.

[Figure 22:](#) Ceramic material directly above (and resting on) the deeply buried steps in the eastern extent of the axial trench for Structure B33: a. possibly Calabaso Gouged-Incised; b. Canoa Incised; c., e., i. burnt Tinaja Red; d., f., h. Palmar Orange-Polychrome; g. Tinaja Red; j. Platon Punctated; k. Belize Red; l. burnt Chaquiste Impressed; m. possibly eroded Valentin Unslipped; n., o., q. Valentin Unslipped; p. eroded Calabaso Gouged-Incised.

[Figure 23:](#) Artifactual material from directly above (and resting on) the deeply buried steps in the eastern extent of the axial trench for Structure B33: a.-g. chert burins, drills, and bifaces; h.-l. worked bone; m. obsidian inlay; n. pyrite mirror piece.

[Figure 24:](#) Photograph of S.D. C181B-1.

[Figure 25:](#) Plan of S.D. C181B-1 (letters correspond with vessels in Figure 29).

[Figure 26:](#) East-west cross-section of chamber for S.D. C181B-1.

[Figure 27:](#) North-south cross-section of chamber for S.D. C181B-1.

[Figure 28:](#) Detailed plan of beads in the skull area of S.D. C181B-1.

[Figure 29:](#) Ceramic vessels from S.D. C181B-1: a. Dos Arroyos Orange-Polychrome; b. undesignated type; c., d. Pucte Brown.

[Figure 30:](#) Photographs of the polychrome decoration on the basal-flanged bowl from S.D. C181B-1.

[Figure 31:](#) Shell artifacts from S.D. C181B-1: a., b. complete spondylus shells; c.-ddd. spondylus shell beads; eee. shell disk.

[Figure 32:](#) Photograph of areal excavations, Operations C181C and C181D, on the western summit of Structure B33.

[Figure 33:](#) Section of north wall of Operation C181C.

[Figure 34:](#) Plan of Operations C181C and C181D.

[Figure 35:](#) Ceramic vessels associated with Operation C181C: a. Ramonal Scored; b. Pantano Impressed; c. Valentin Unslipped; d. Belize Red.

- [Figure 36:](#) Photograph of Structure B32 and Operations C182B, C182C, and C182D, looking southwest.
- [Figure 37:](#) Photograph of Structure B32 and Operations C182B, C182C, and C182D, looking northwest.
- [Figure 38:](#) Photograph of excavation into the core of Structure B32 (Operation C182B).
- [Figure 39:](#) Section of Operation C182B.
- [Figure 40:](#) Plan of Operation C182B.
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- [Figure 45:](#) Plan of Operation C182D.
- [Figure 46:](#) Ceramic vessels associated with Structure B32: a., b. Pepet Incised; c. eroded Paixban Buff-Polychrome; c., d. Valentin Unslipped.
- [Figure 47:](#) Artifactual materials associated with Structure B32: a.-c. fragmentary green obsidian blades; d. ceramic figurine fragment; e. worked bone; f. chert biface; g. shaped and drilled ceramic; h. riverine snail; i. ceramic colander sher; j. ceramic modeled-carved sherd; k. Carro Modeled ceramic sherd; l ceramic dog head.
- [Figure 48:](#) Photograph of Structure B31 with Operation C183E in the foreground.
- [Figure 49:](#) Section of Operation C183E.
- [Figure 50:](#) Plan of Operation C183E.
- [Figure 51:](#) Ceramic materials associated with Operations C183C, C183D, C183E, and C183F: a. undesignated type; b. undesignated type; c. Belize Red; d. probably Daylight Orange; e. eroded Tinaja Red.
- [Figure 52:](#) Artifactual materials associated with Operation C183E: a.-d. chert tools; e. burnt olive shell.
- [Figure 53:](#) Photograph of Structure B31 with Operation C183F in the foreground.
- [Figure 54:](#) Section of Operation C183F.
- [Figure 55:](#) Plan of Operation C183F.
- [Figure 56:](#) Artifactual materials associated with Operation C183F: a.-c. chert tools; d., f., h. ceramic figurine fragments; e. pyrite mirror piece; g. marine shell fragment.
- [Figure 57:](#) Photograph of Operation C183C, looking east.
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- [Figure 63](#): Plan of Operation C183D.
- [Figure 64](#): Artifactual materials from Operation C183D: a.-d. chert tools.
- [Figure 65](#): Photograph of Operation C183H, looking west.
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- [Figure 86](#): Rollout photograph of polychrome cylinder (Figure 83h) from S.D. C179B-7.
- [Figure 87](#): Rollout photograph of modeled-carved cylinder (Figure 83a) from S.D. C179B-7.

[Figure 88:](#) Artifactual materials from within a ring-base dish (Figure 83n) in S.D. C179B-7: a.-h. fragmentary obsidian blades; i. worked bone “bead;” j. burnt worked bone; k., l., n., o., p.-u. worked shell; m. chert flake; v.-y. bone pins; z. riverine shell; aa.-cc. worked olive shells.

[Figure 89:](#) Lithic artifactual materials from within S.D. C179B-7: a.-r. fragmentary obsidian blades; s.-dd. chert tools; ee. chert tool from Operation C179H.

[Figure 90:](#) Other artifactual materials from within S.D. C179B-7: a., b. bone pins/needles; c.-i., k., l. worked bone; j. fish vertebrae with inlaid hematite; m. stone spindle whorl; n. bone awl; o. jadeite bead; p., s. marine shell fragments; q. pomacea shell; r. worked shell adornment; t.-y. riverine shells; z. worked olive shell; aa. worked stone.

[Figure 91:](#) Photograph of possible labret (Figure 88j) from S.D. C179-7.



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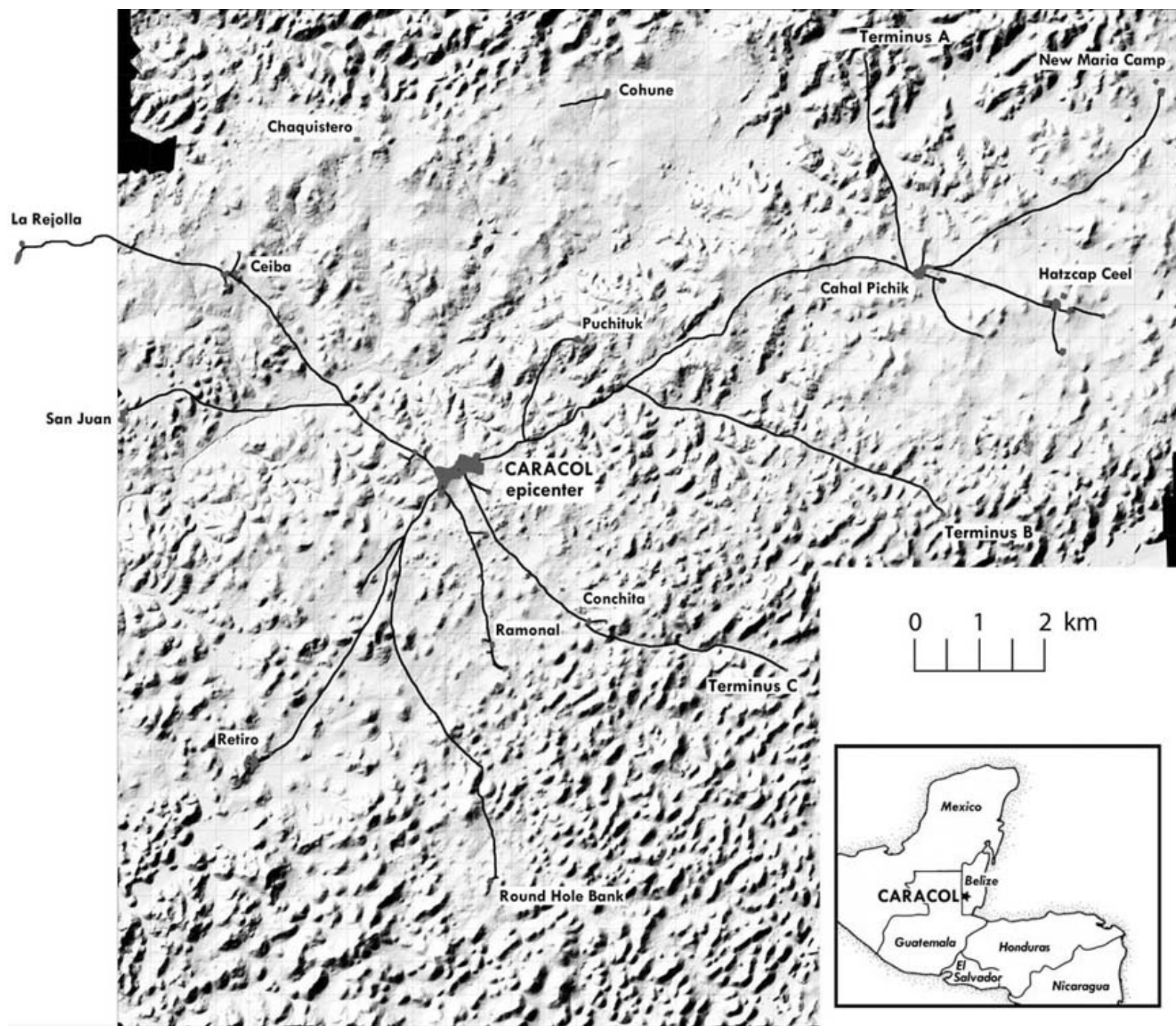
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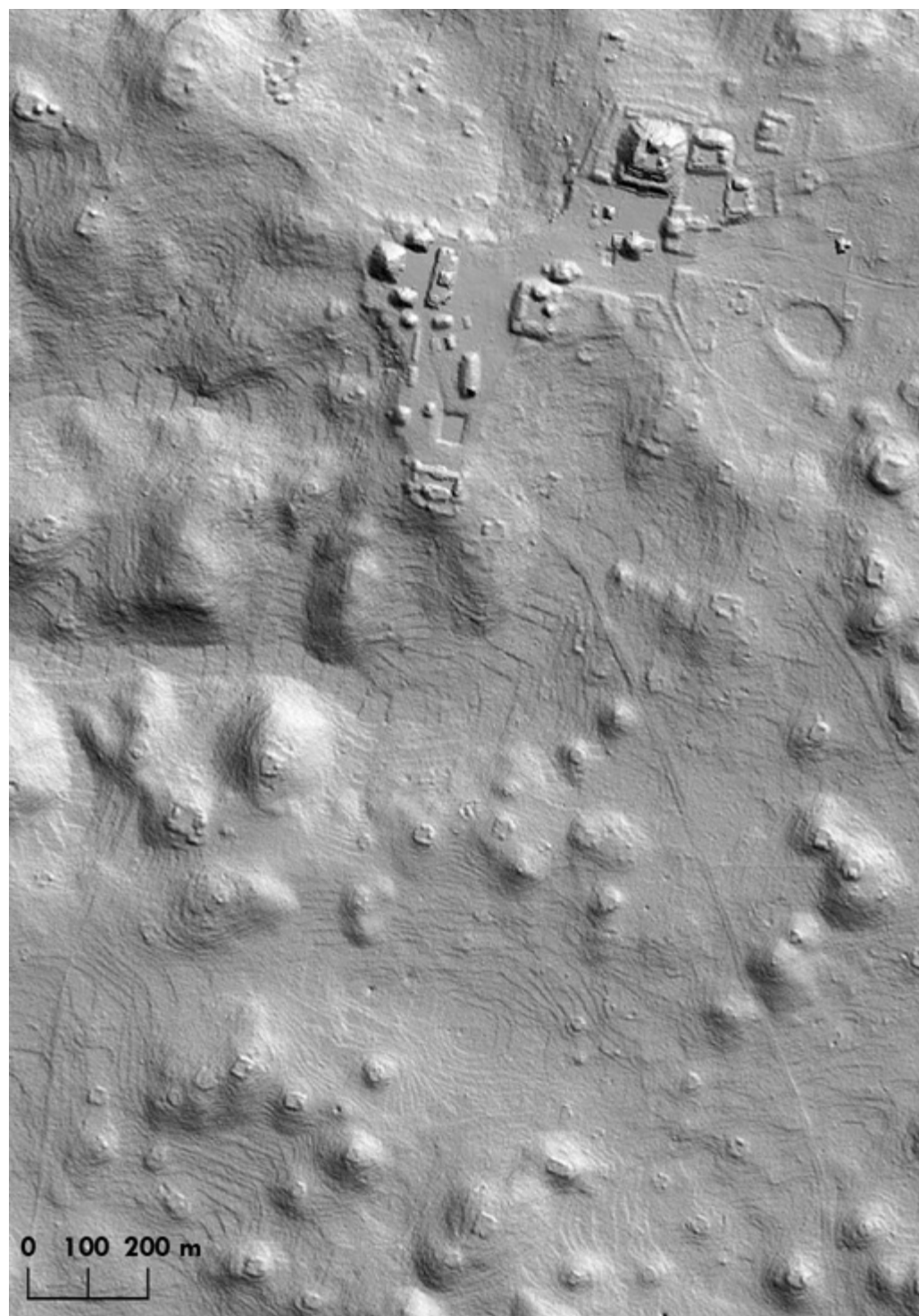
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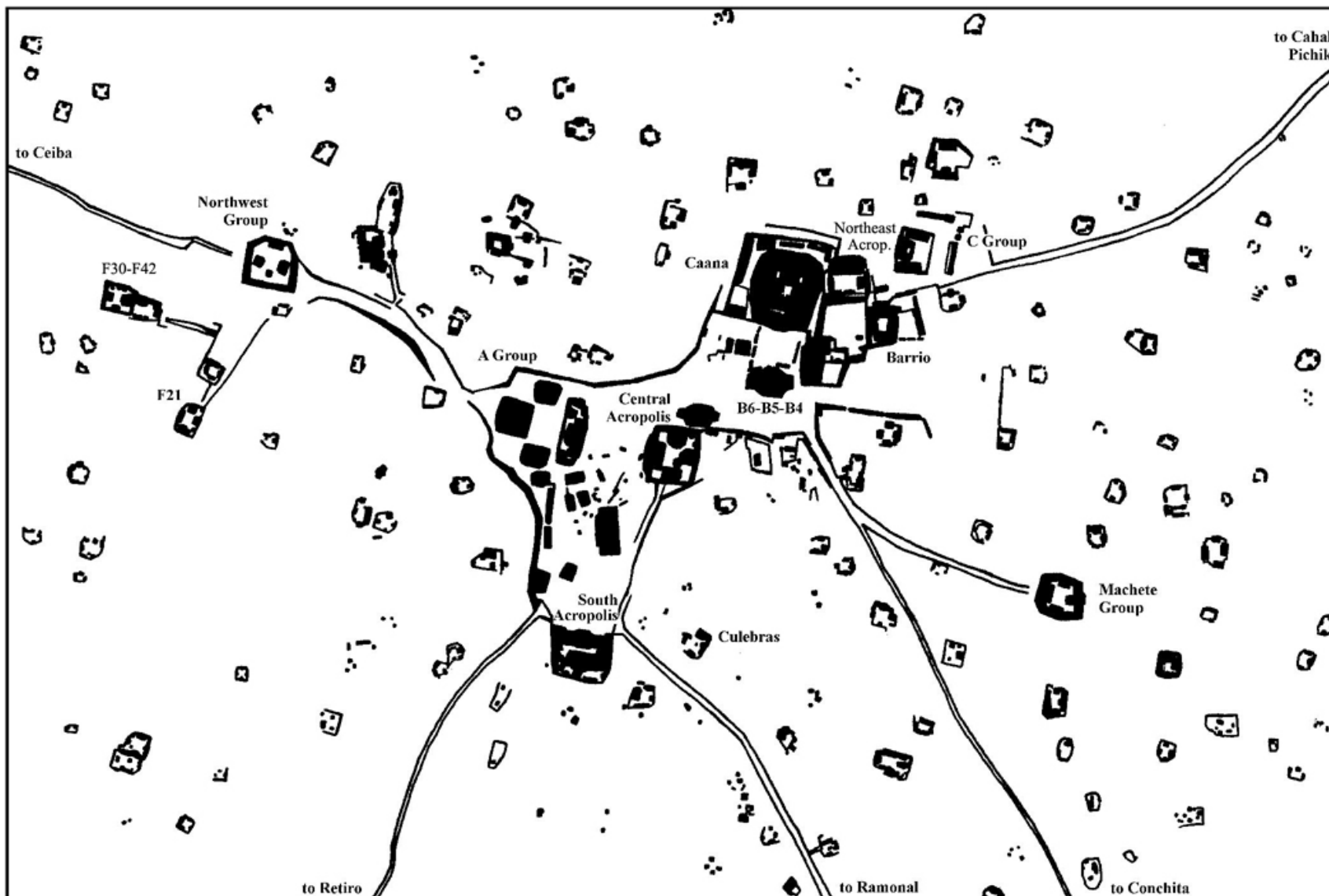
Undergraduate students Nelissa and Allison on top of Caana











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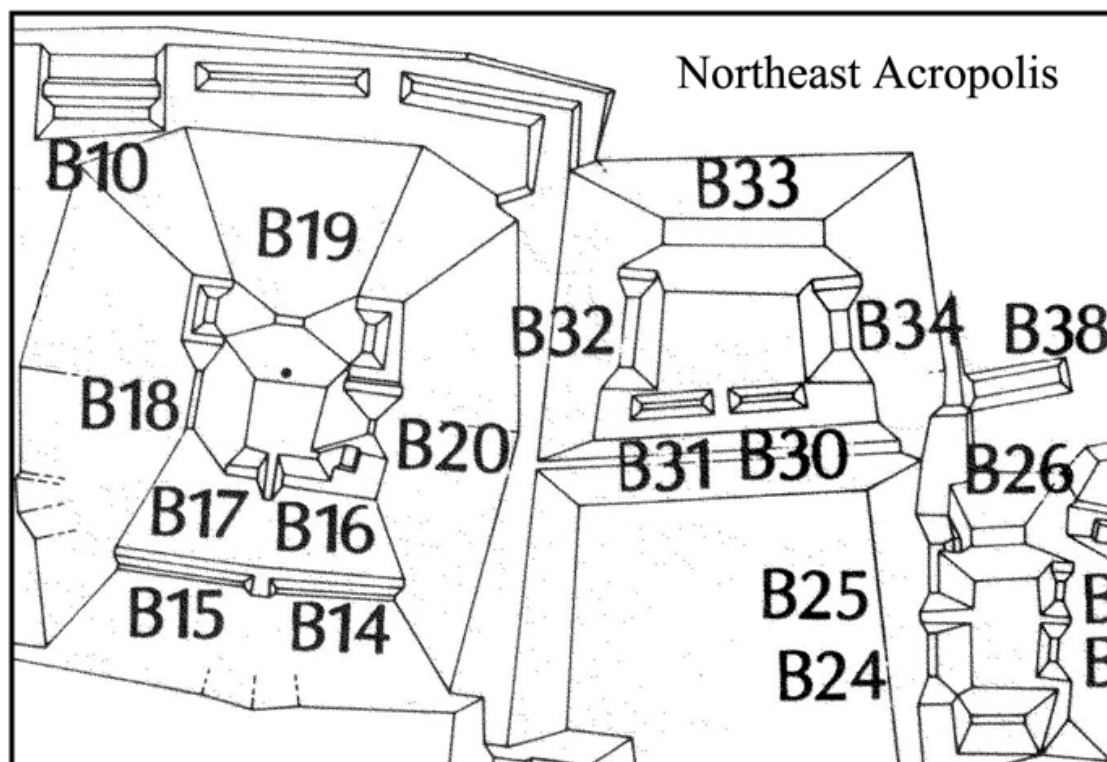
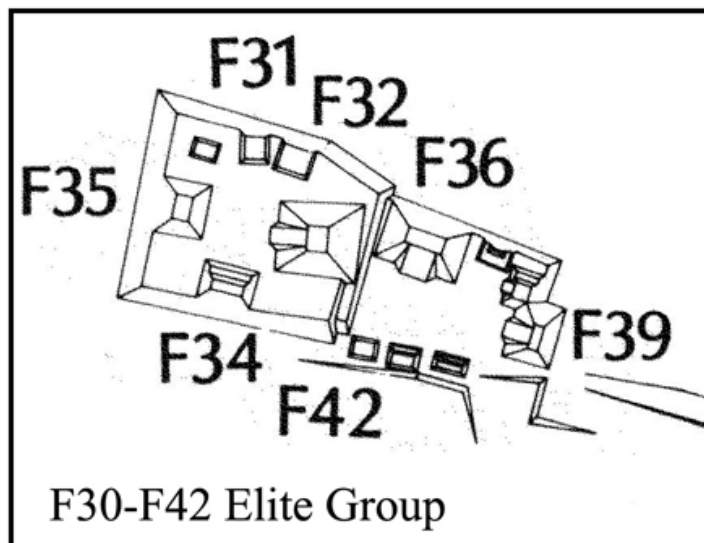


500 meters

# CARACOL, BELIZE

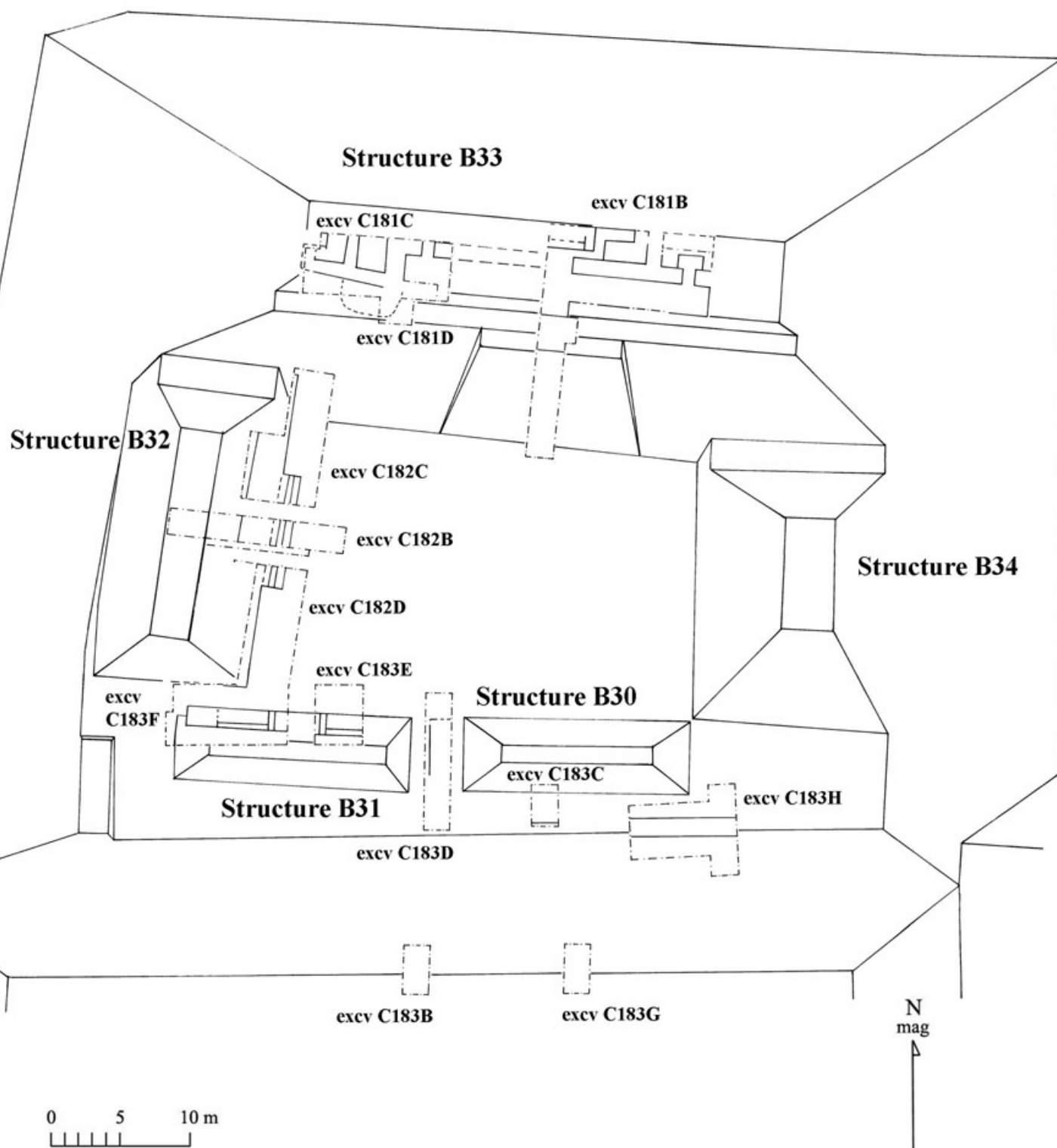
## Epicenter & Surrounding Settlement

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# CARACOL Northeast Acropolis



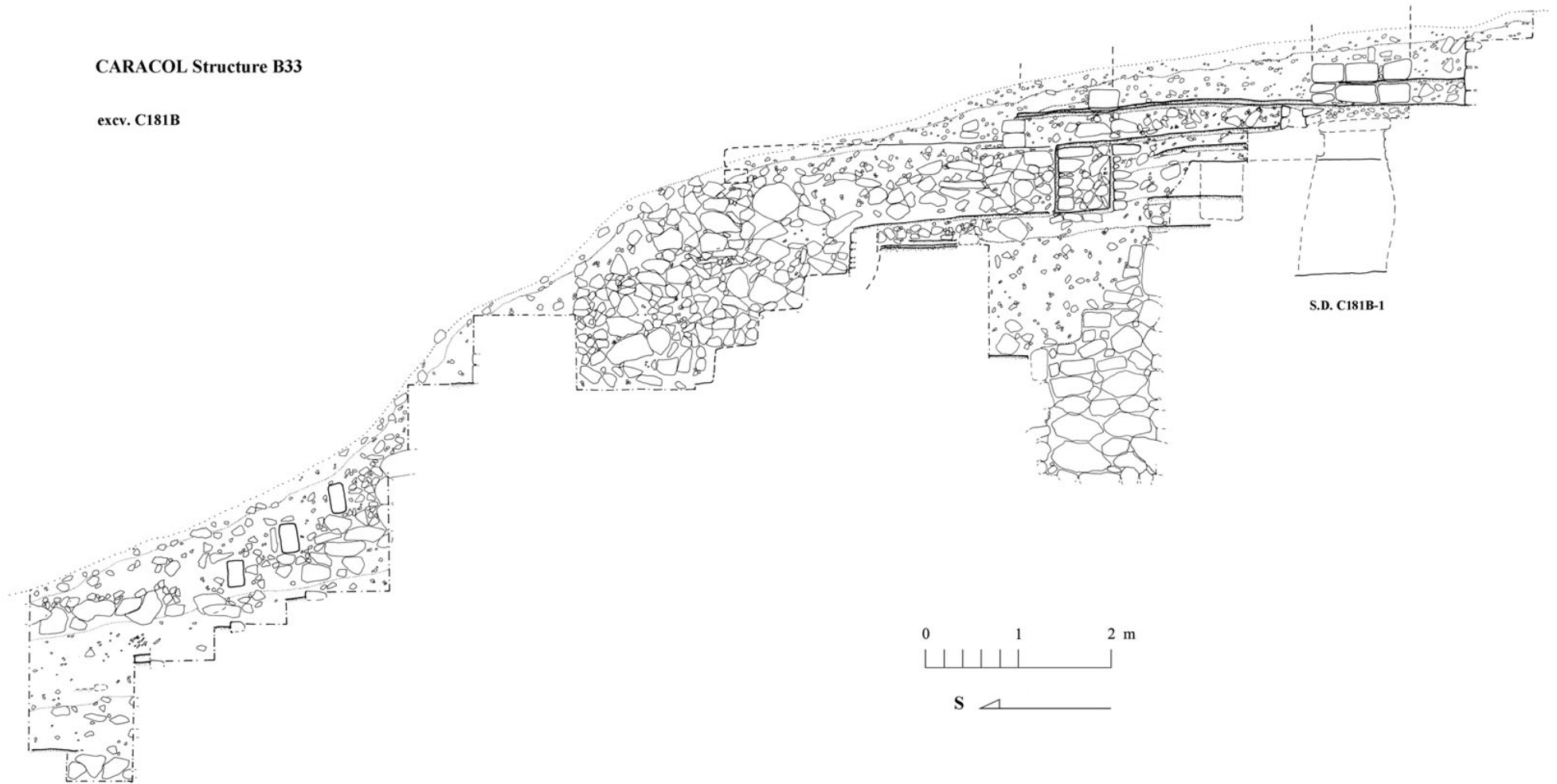






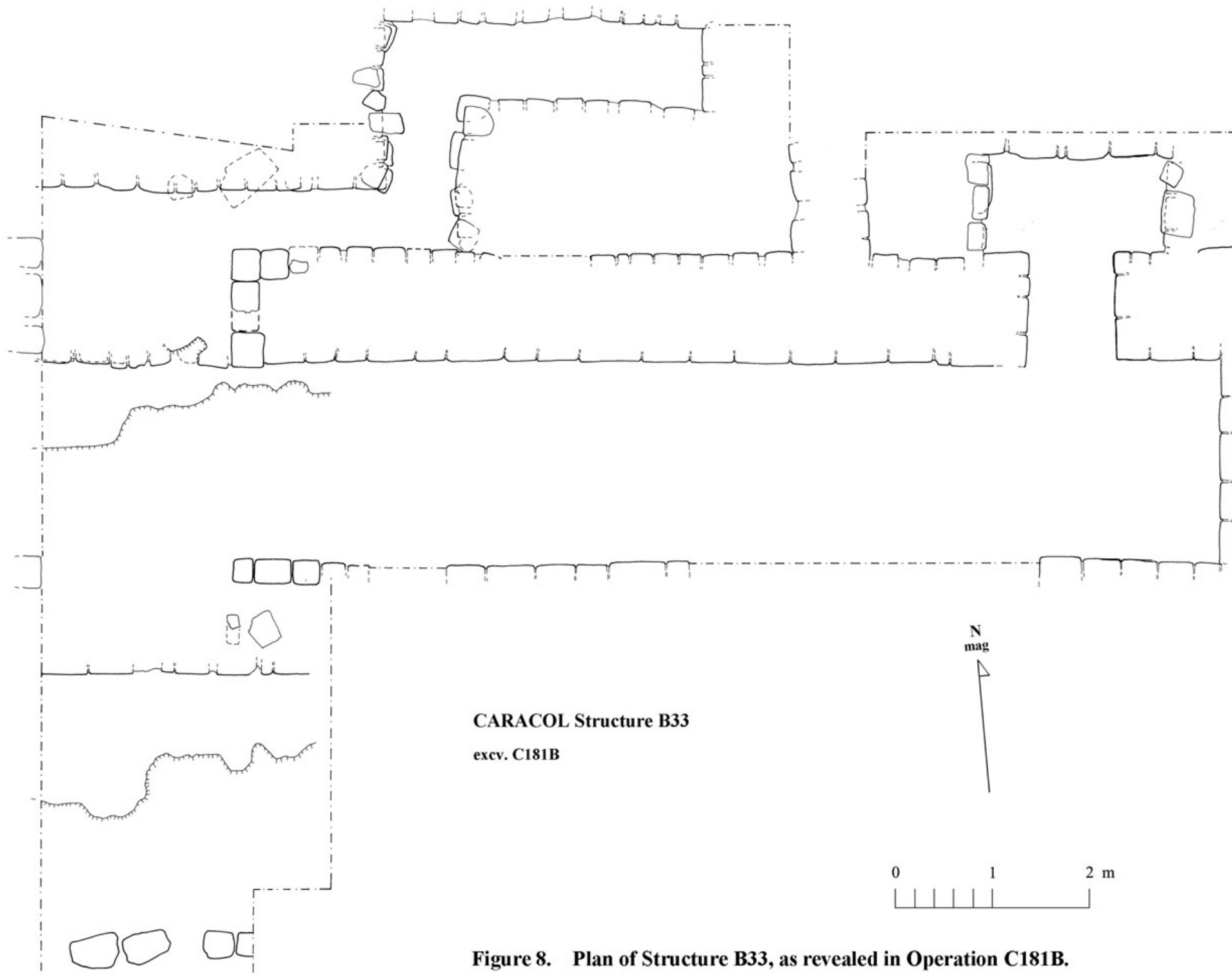
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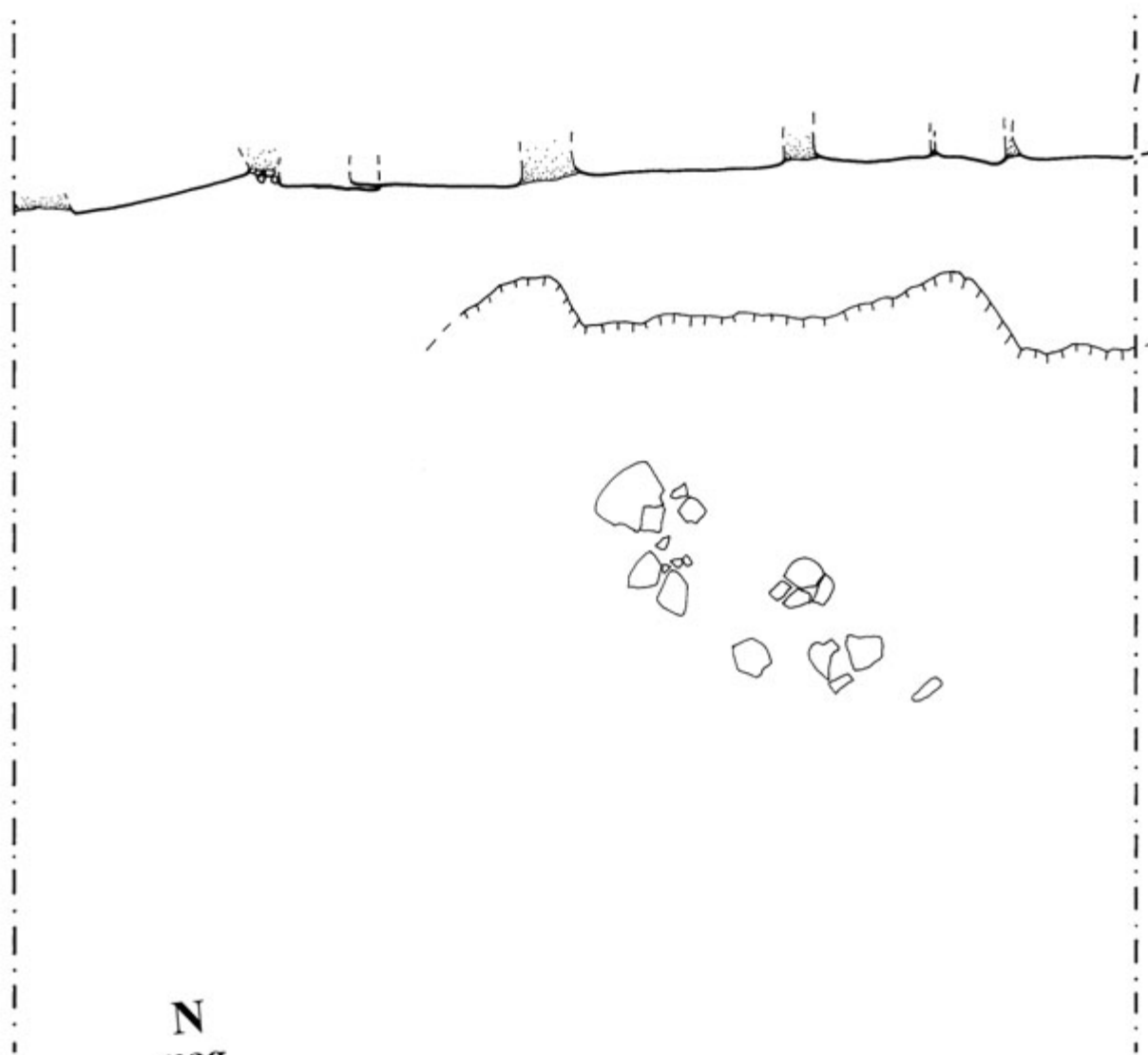








**Figure 8. Plan of Structure B33, as revealed in Operation C181B.**



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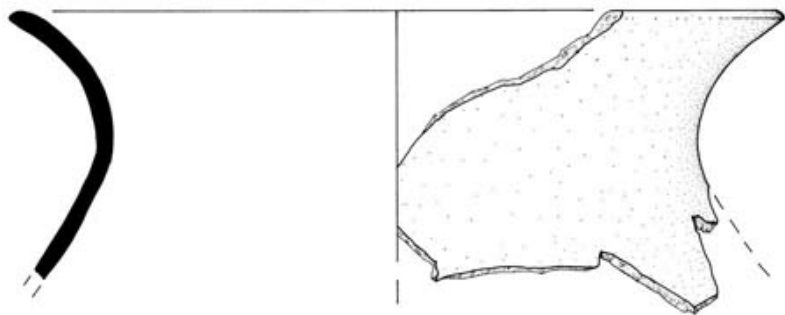


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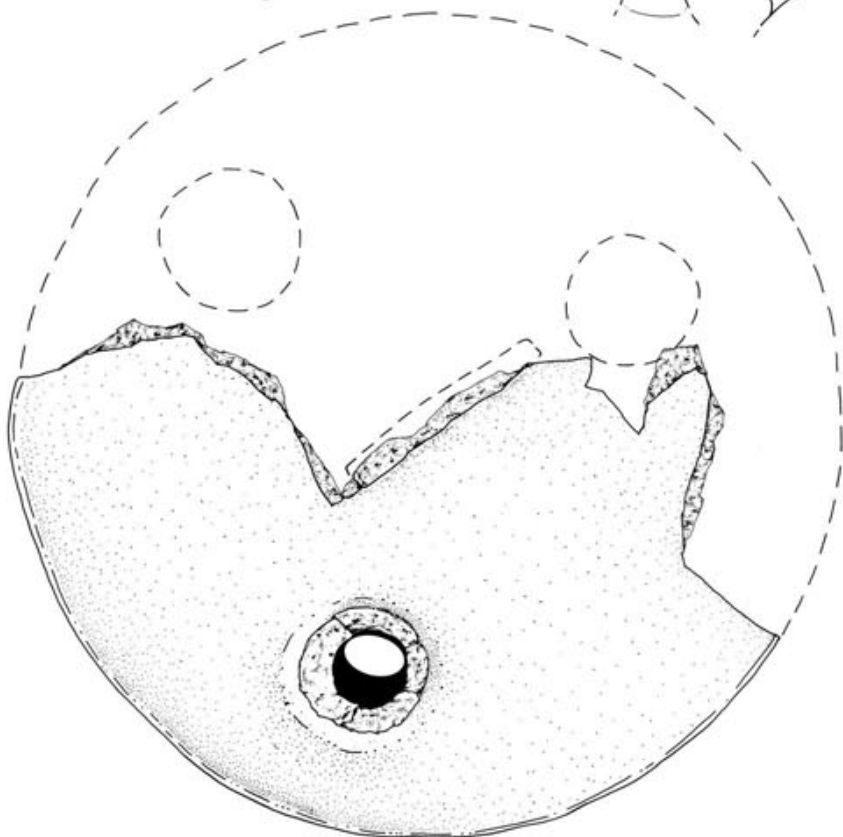
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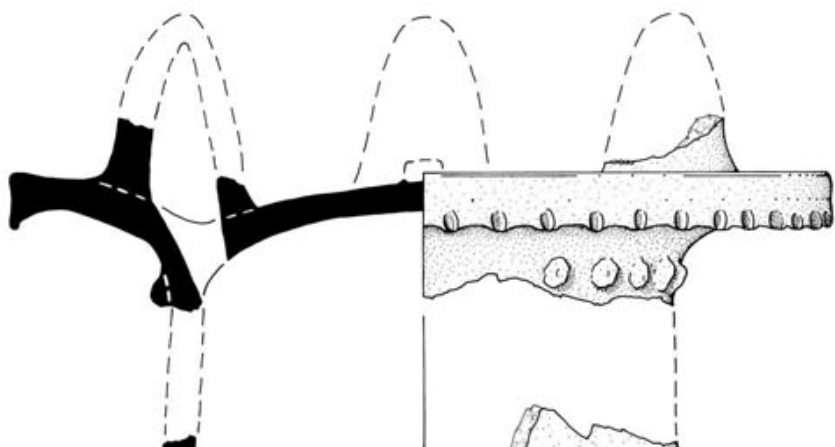
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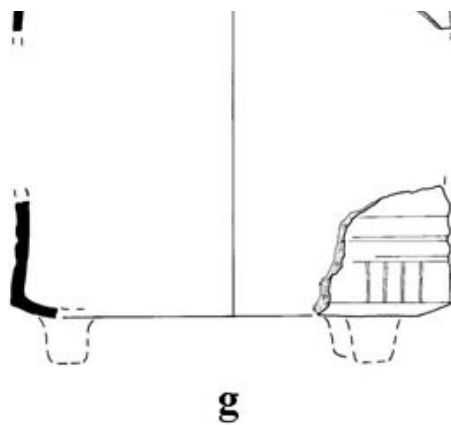
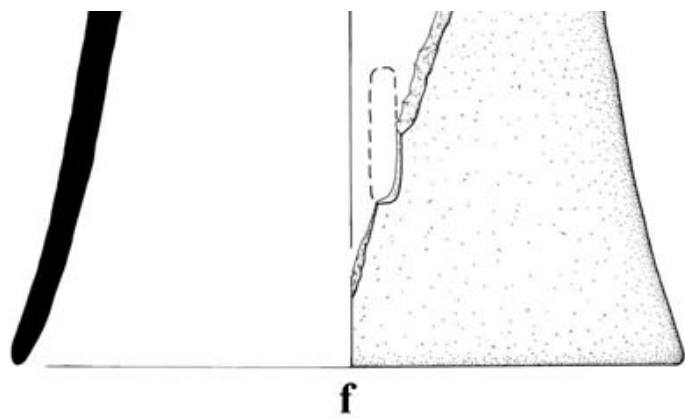
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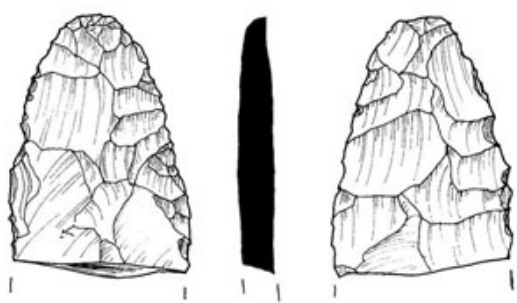


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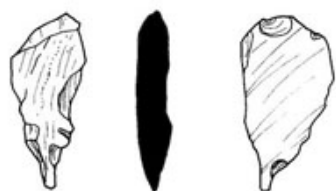








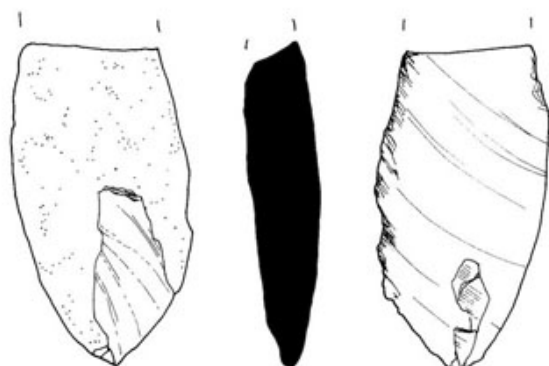
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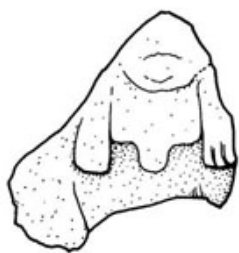
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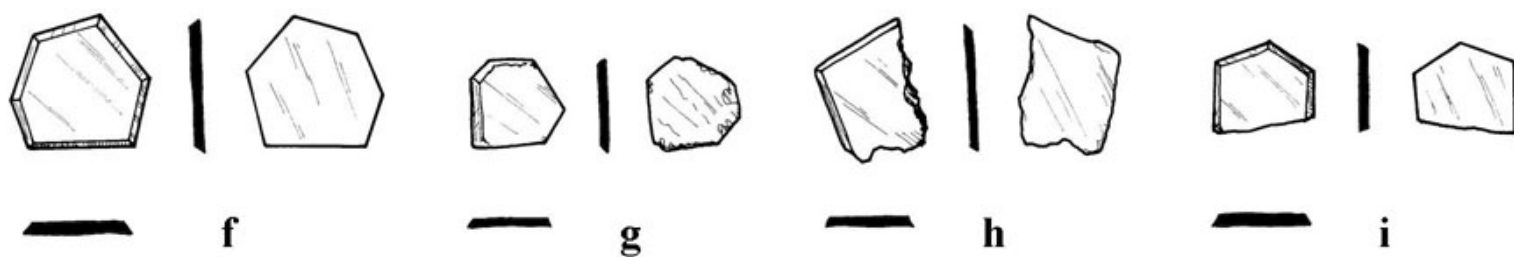
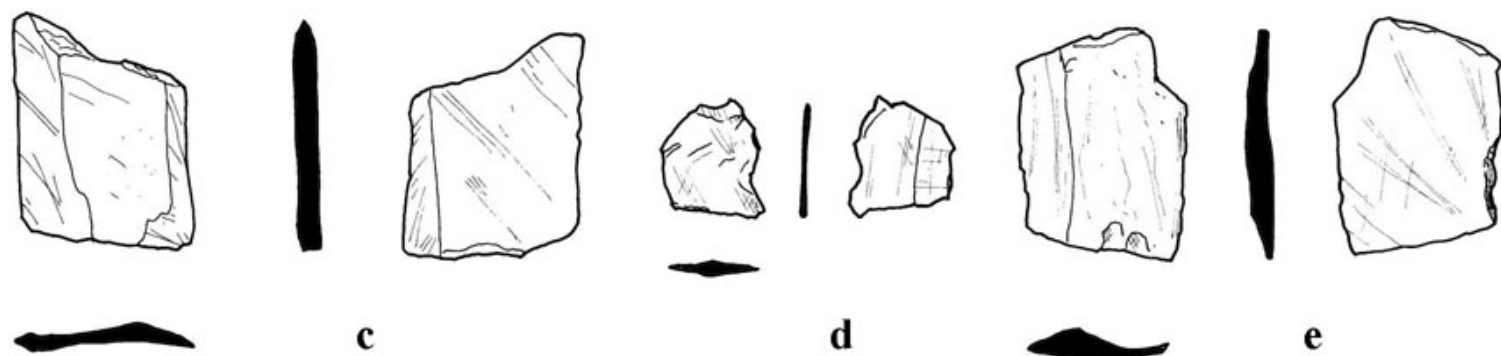
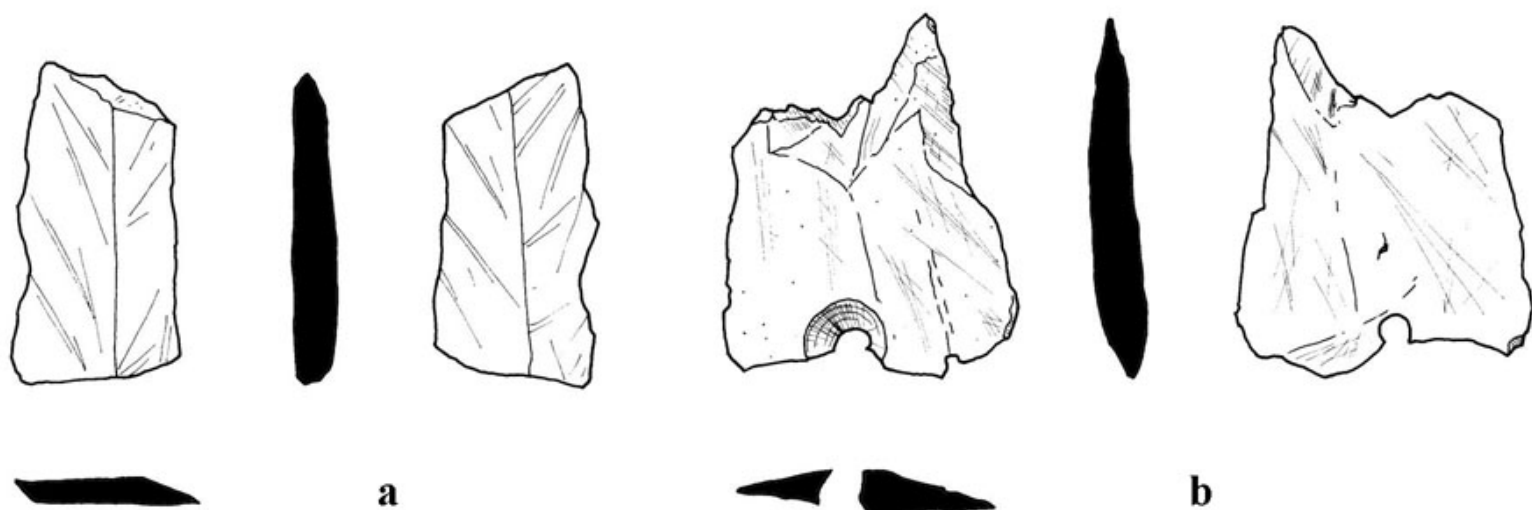
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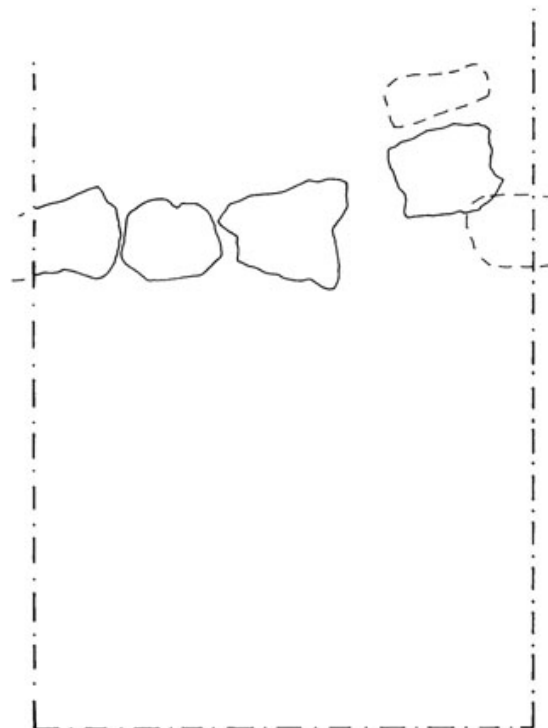




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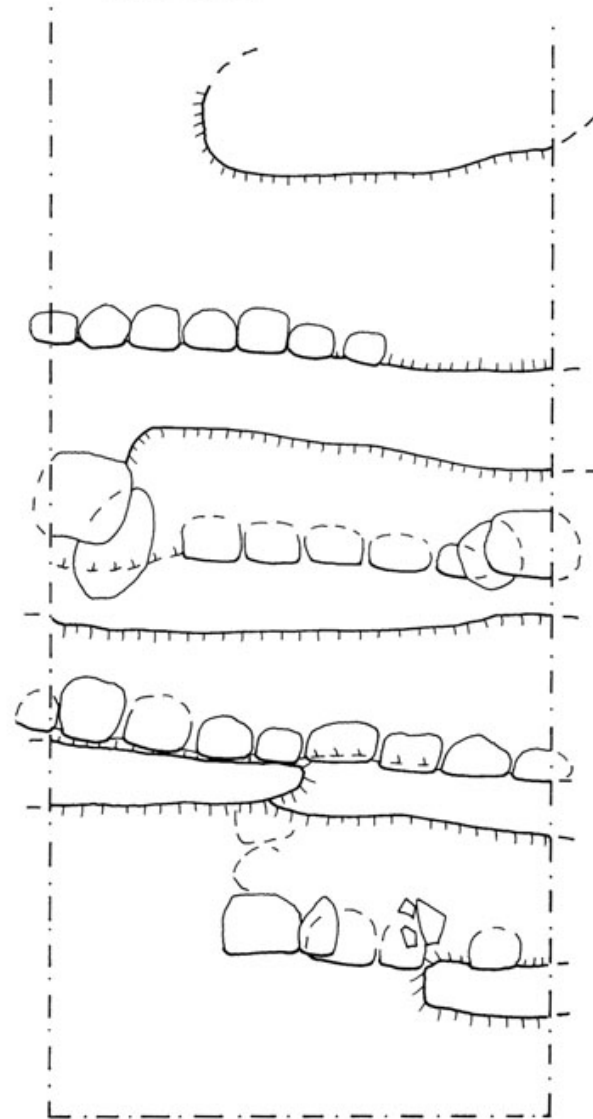


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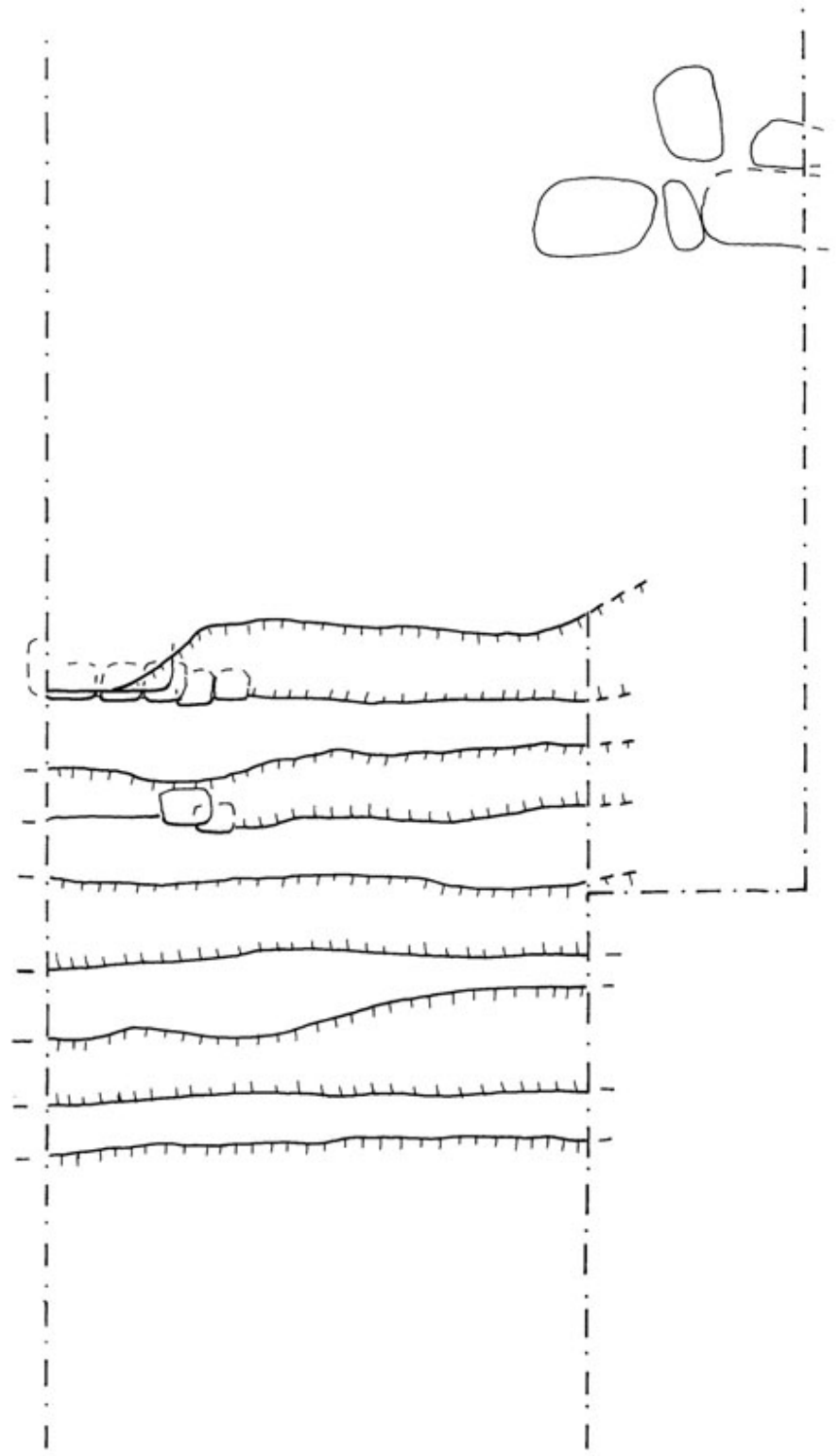
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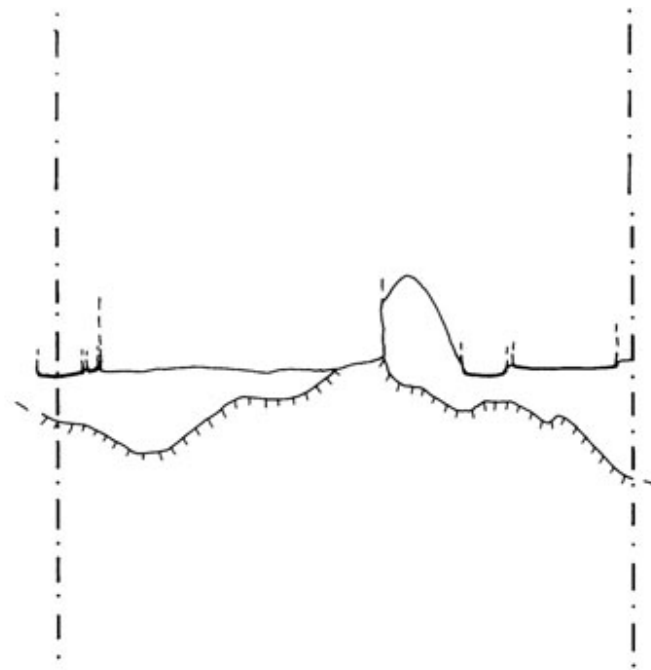
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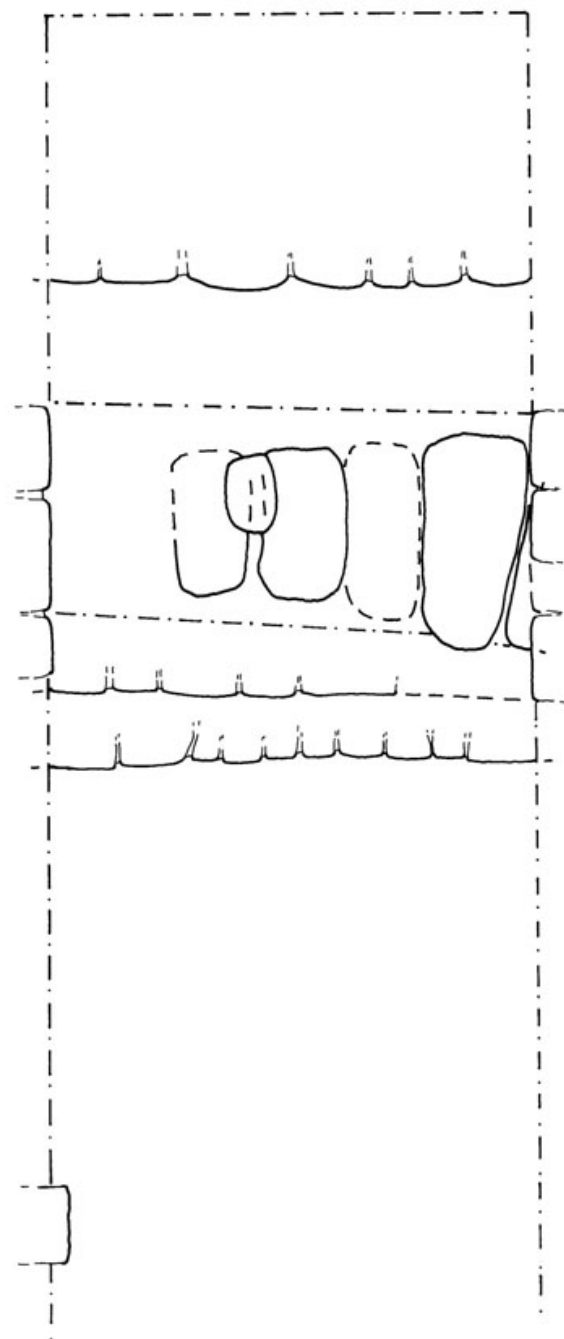
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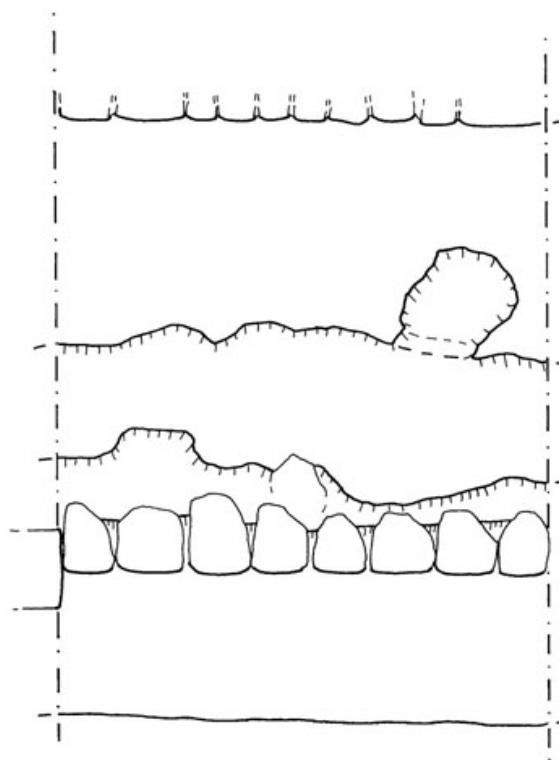




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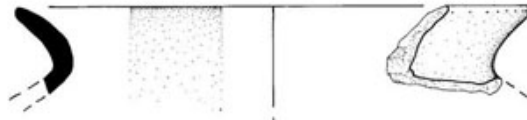








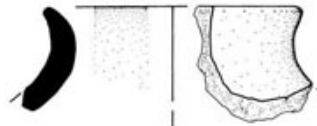
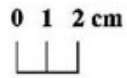
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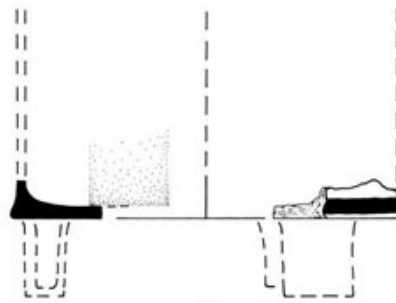
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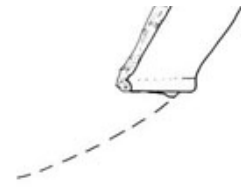


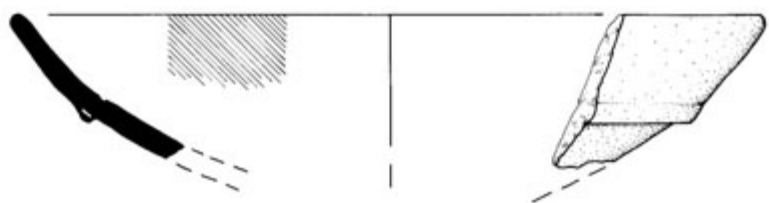
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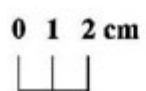
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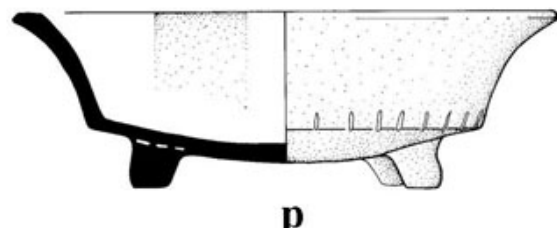
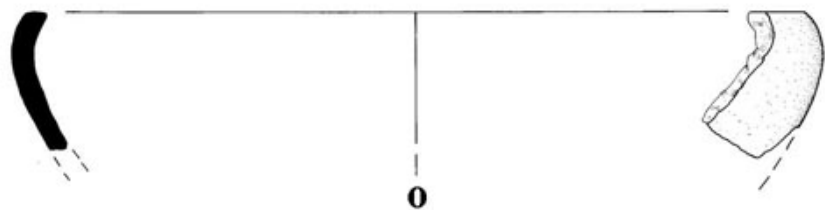
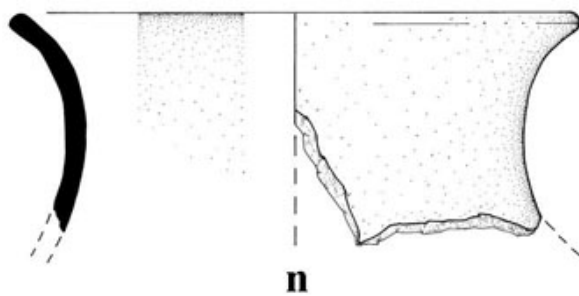
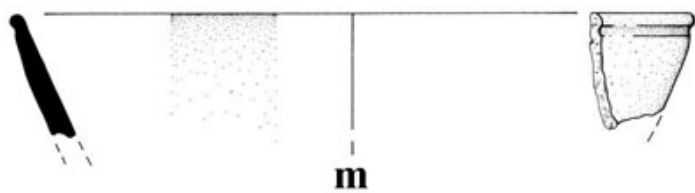
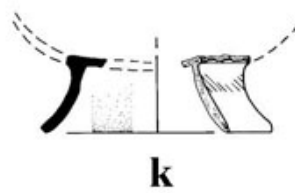
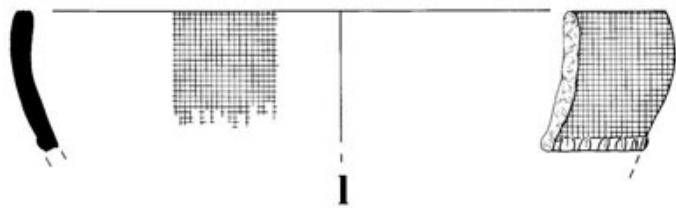
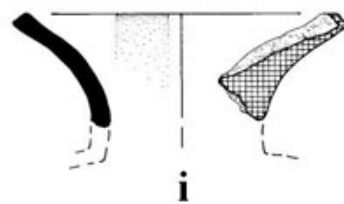
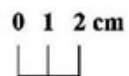
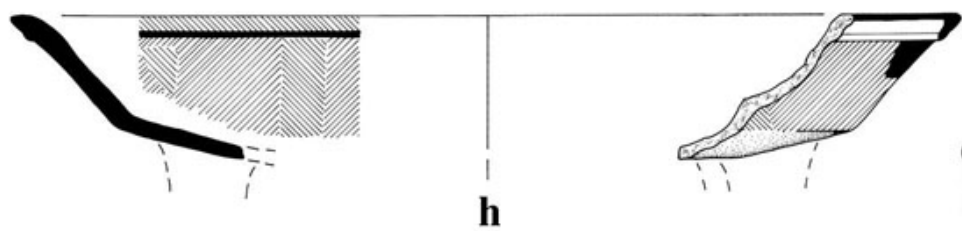
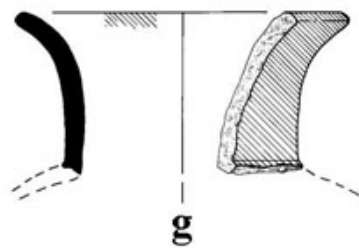
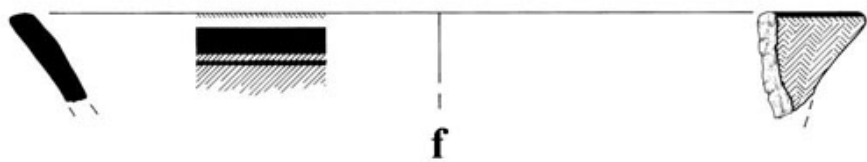
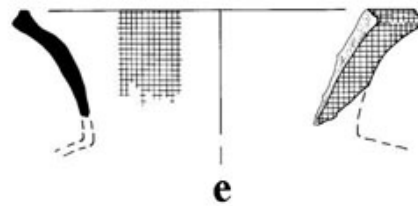
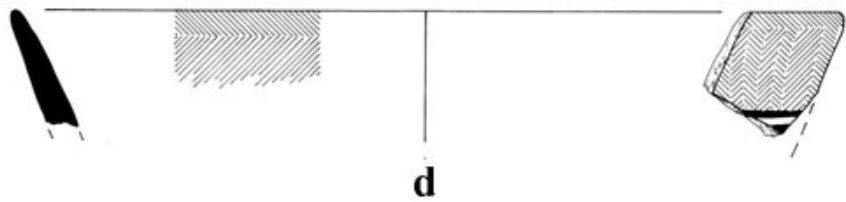
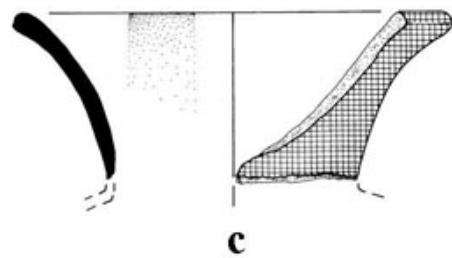
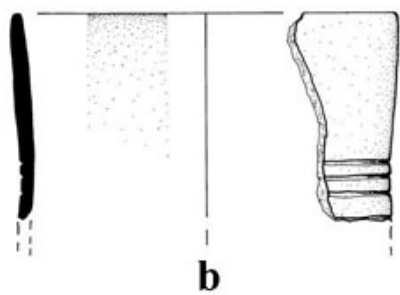
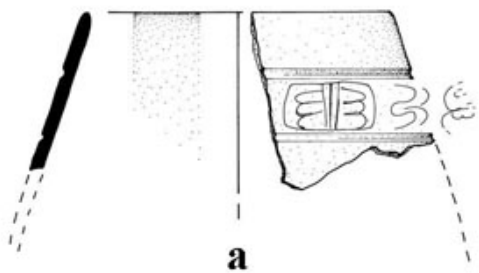


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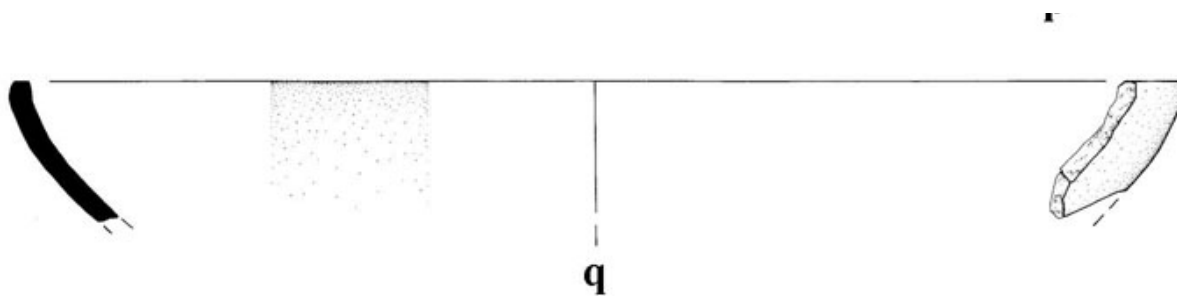


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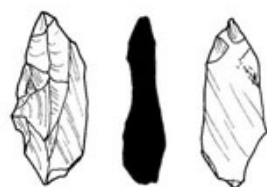








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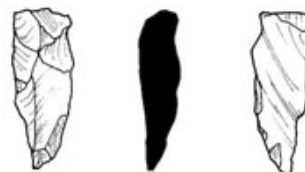
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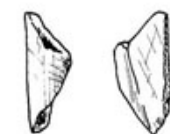
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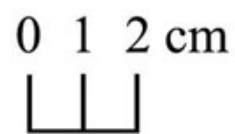
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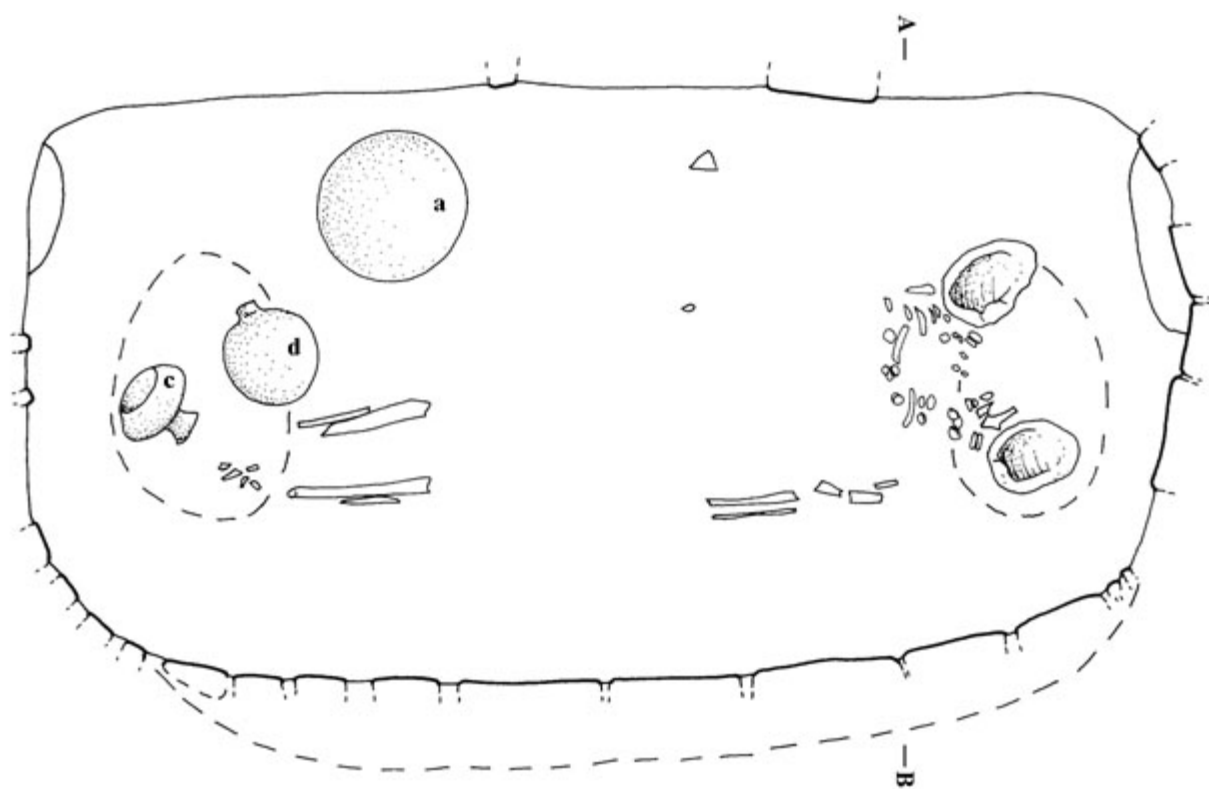


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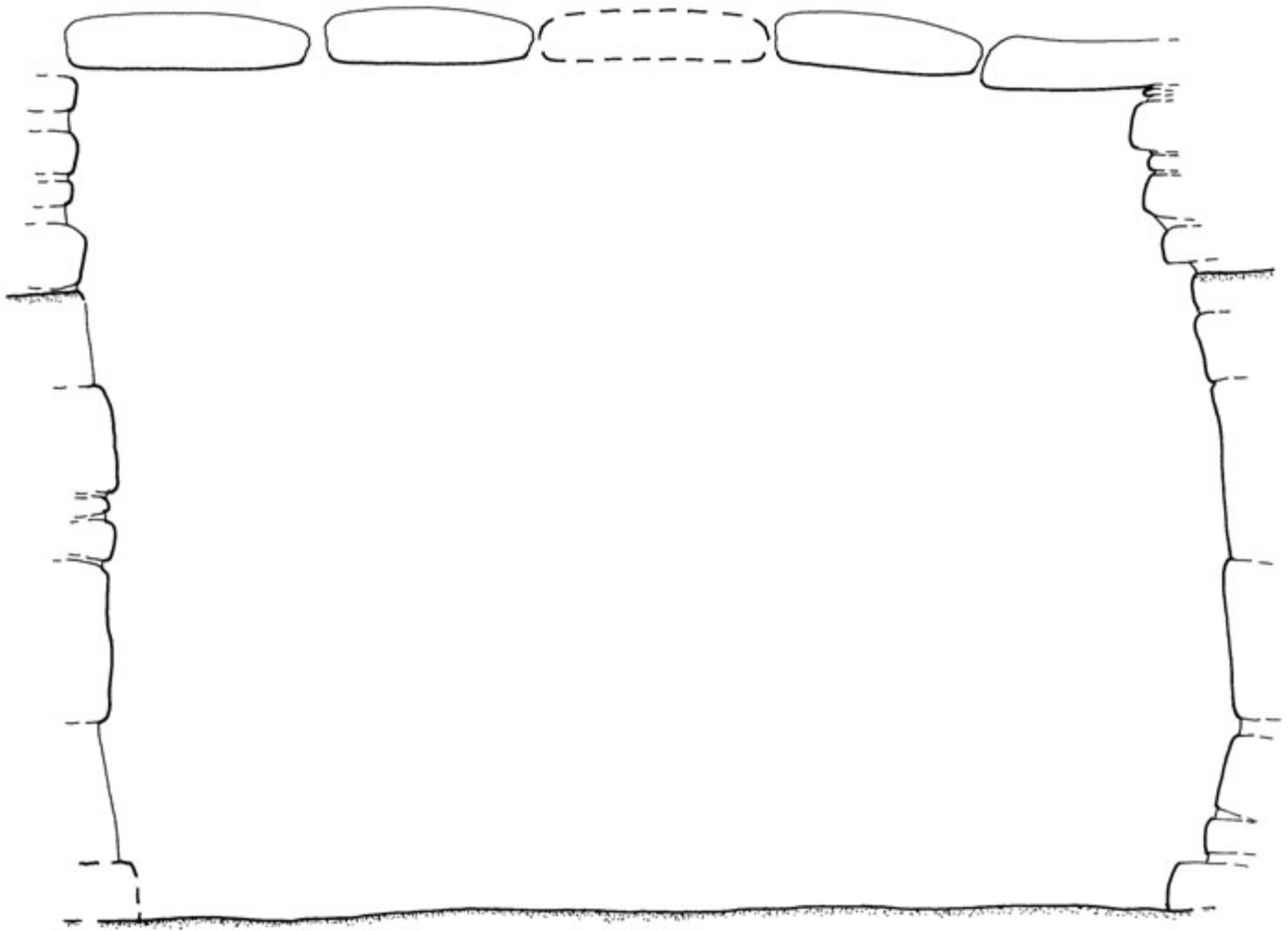


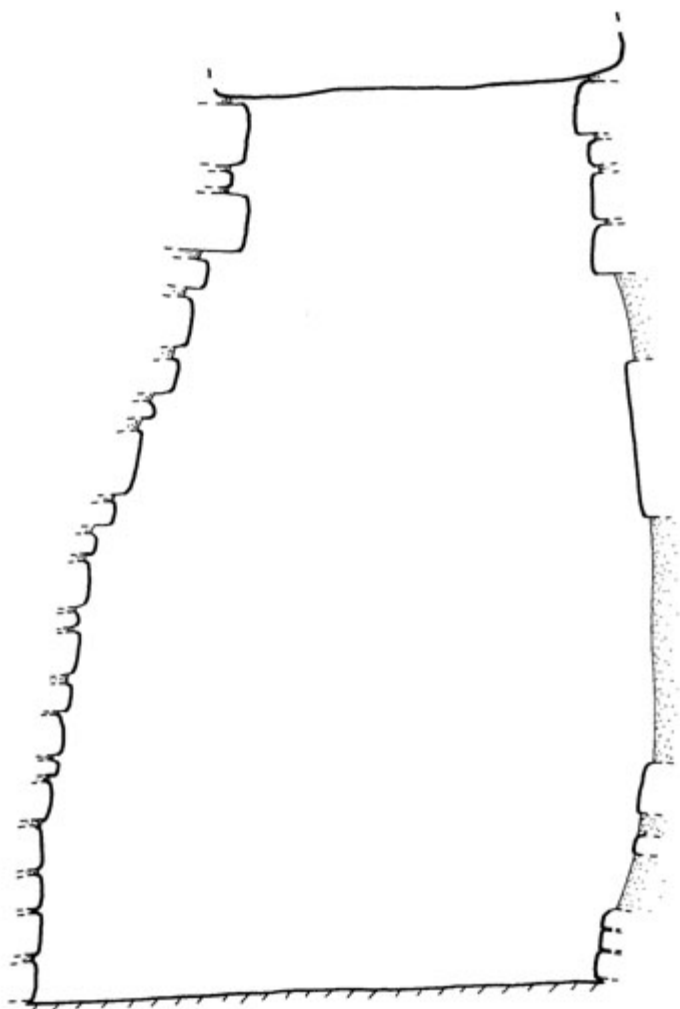
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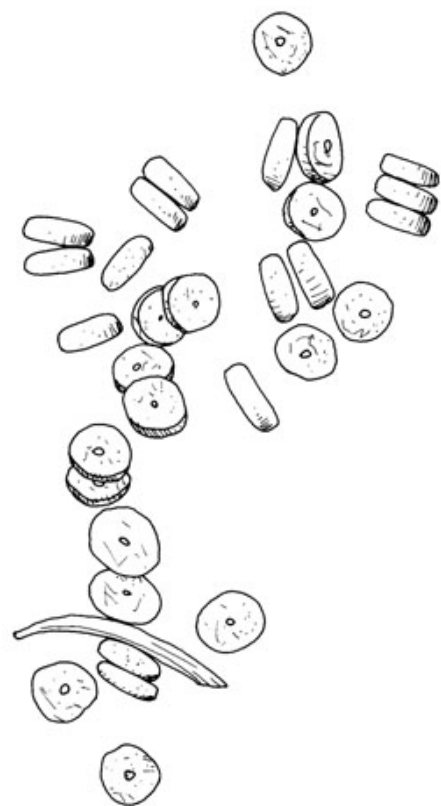
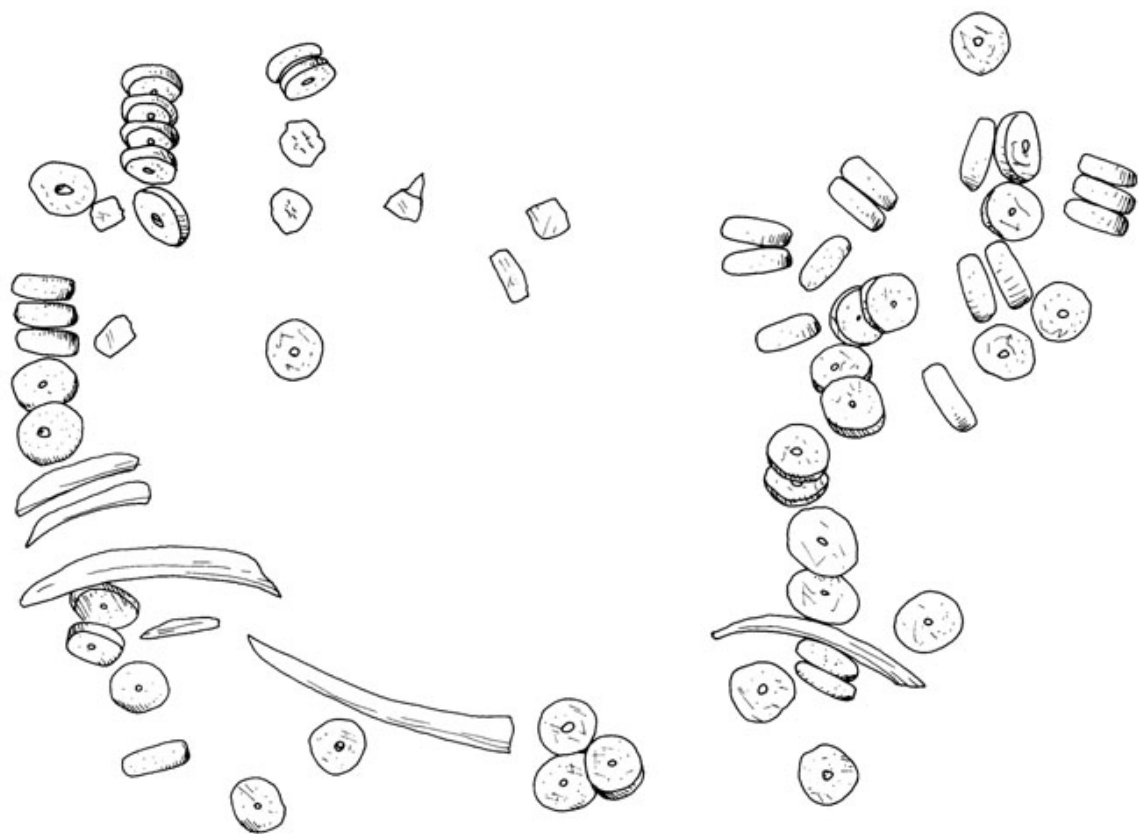
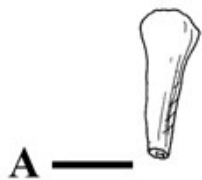




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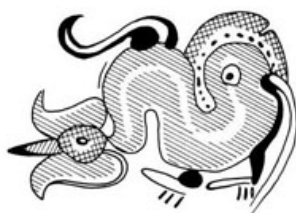
S 



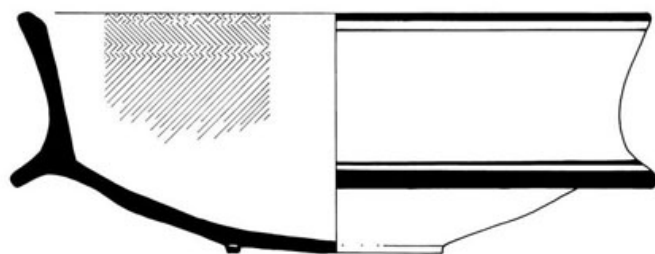
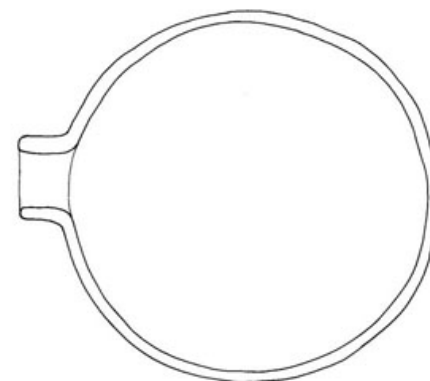
0 2 cm

**N**  
mag

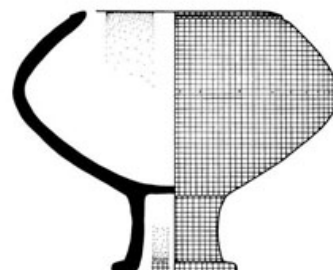




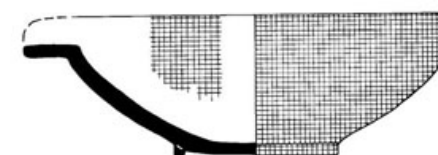
**b**



**a**

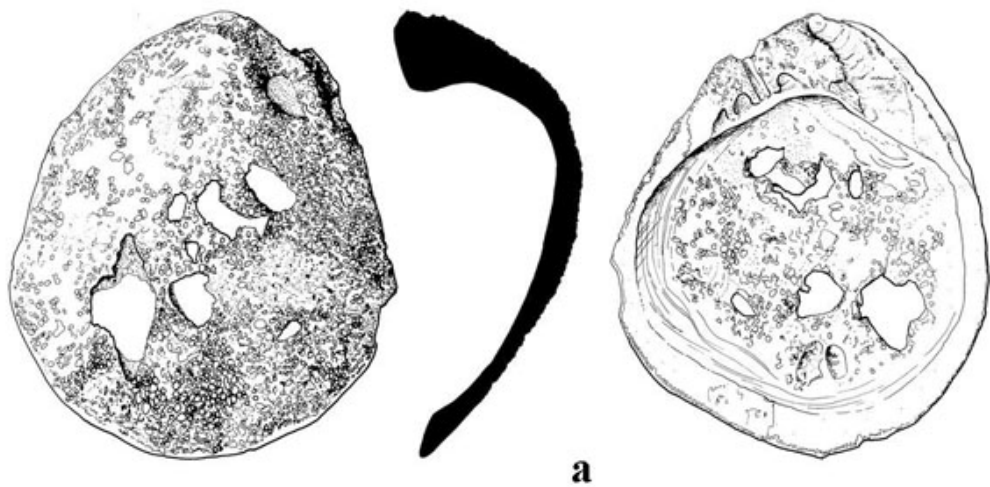


**c**



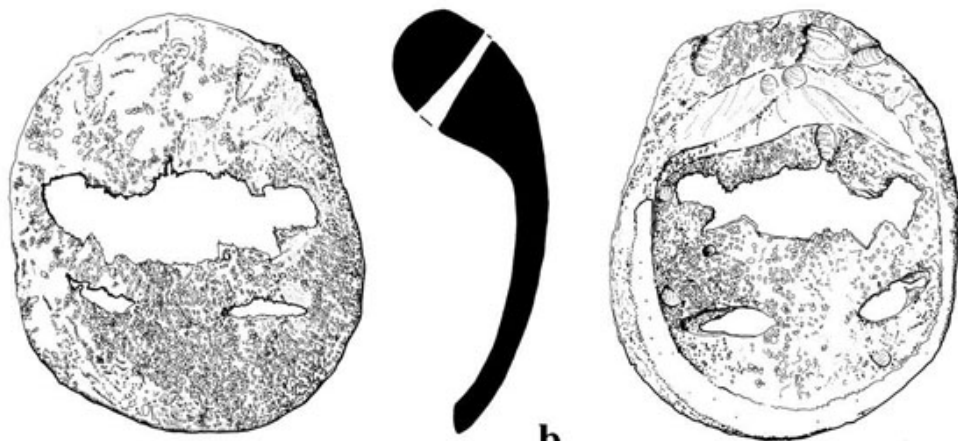
**d**



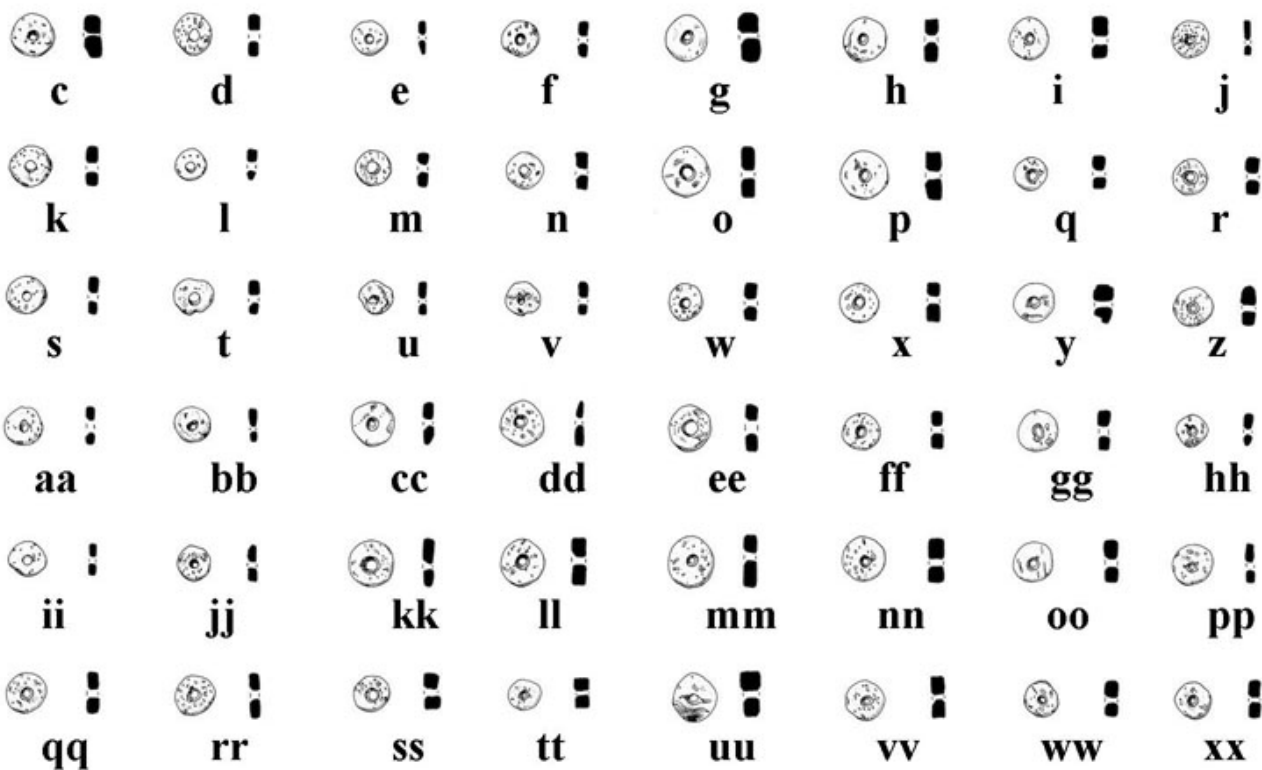


a

0 1 2 cm



b





**yy**



**zz**



**aaa**



**bbb**



**ccc**



**ddd**



**eee**

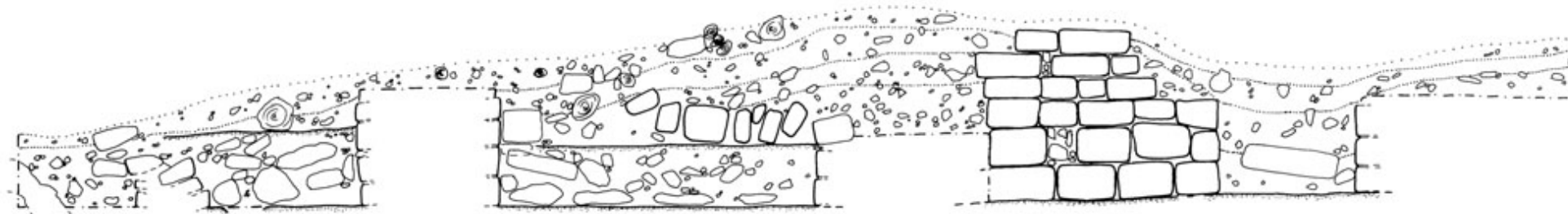




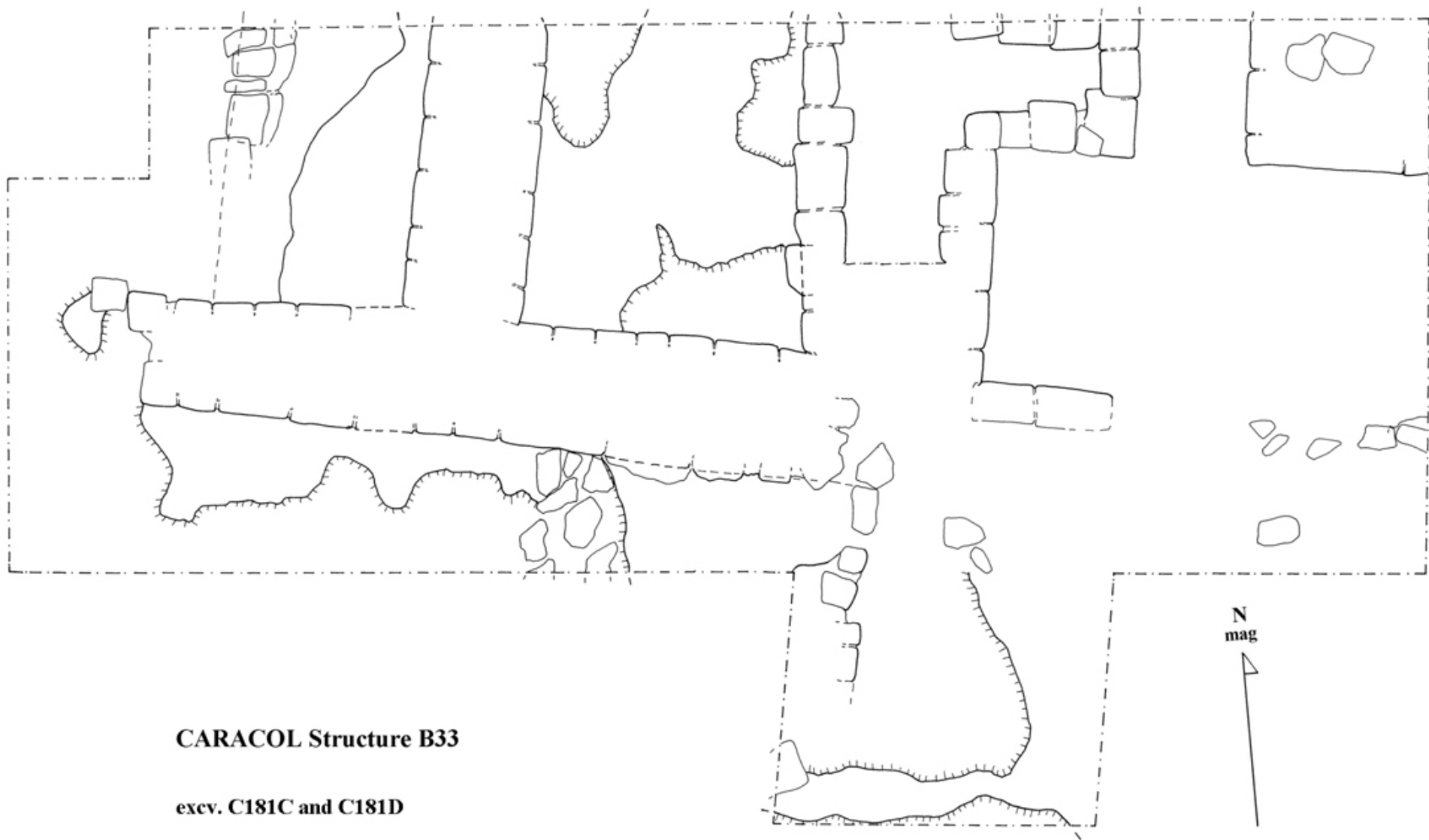


# CARACOL Structure B33

excav. C181C



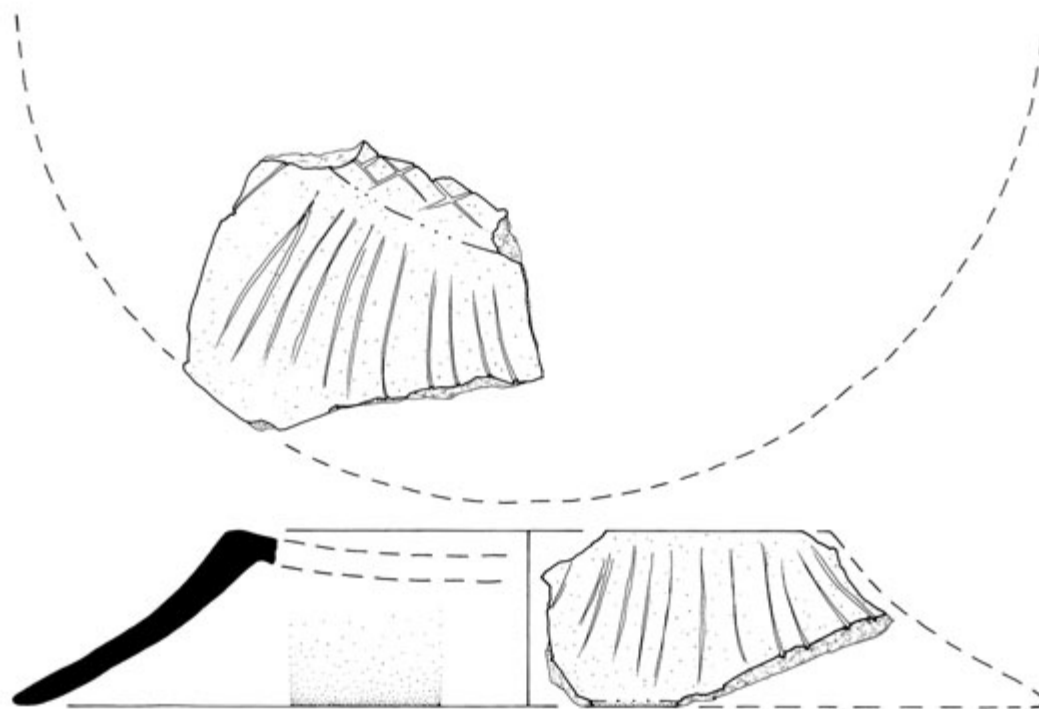
W 



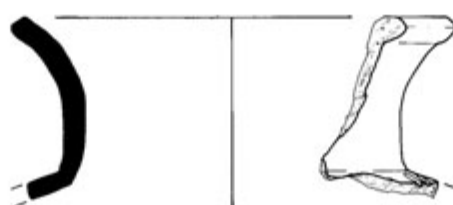
**CARACOL Structure B33**

**excav. C181C and C181D**

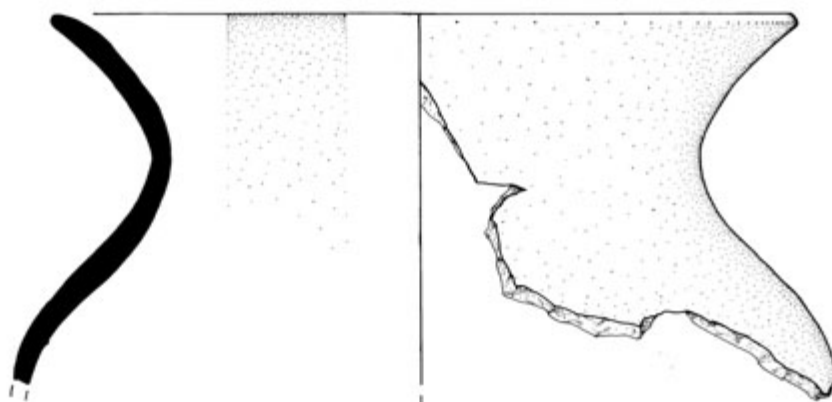




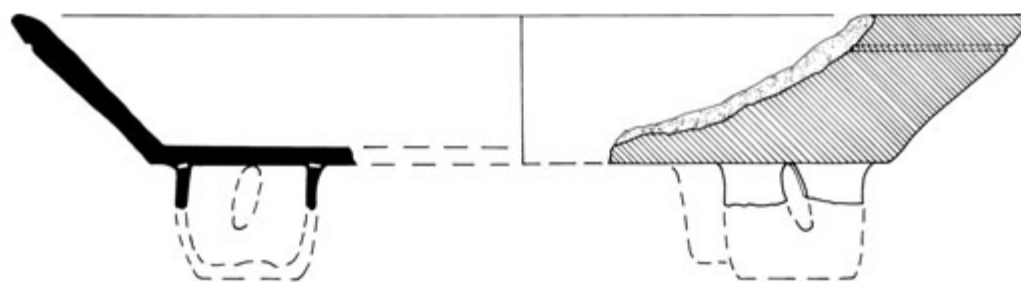
**a**



**b**



**c**



**d**









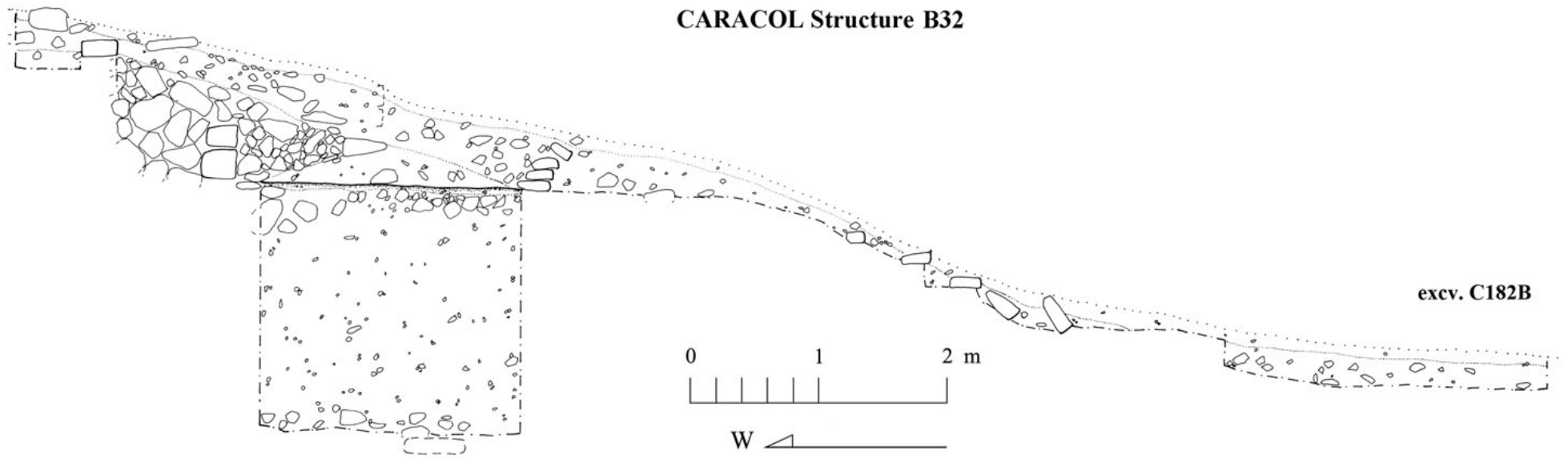


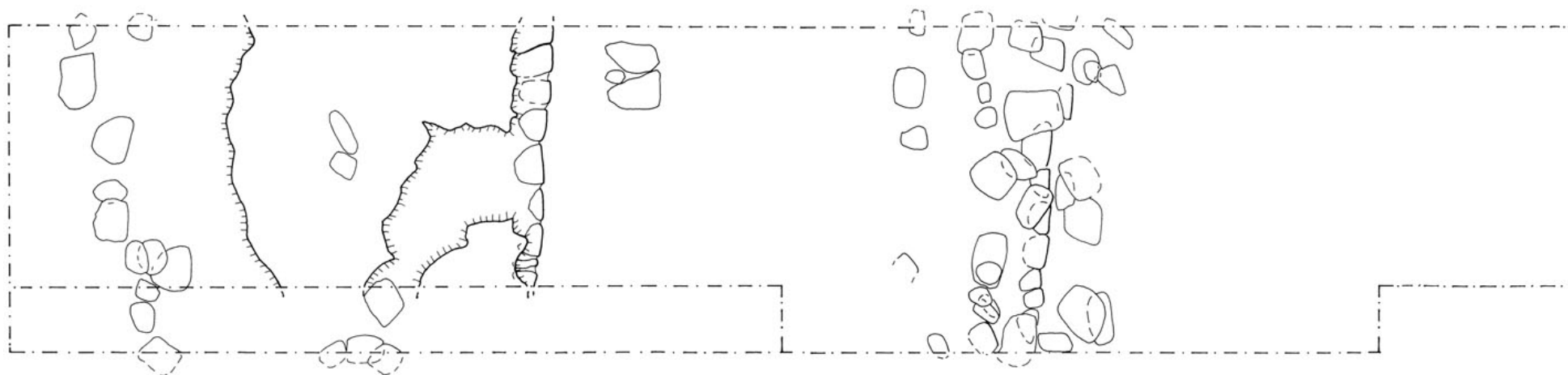






# CARACOL Structure B32

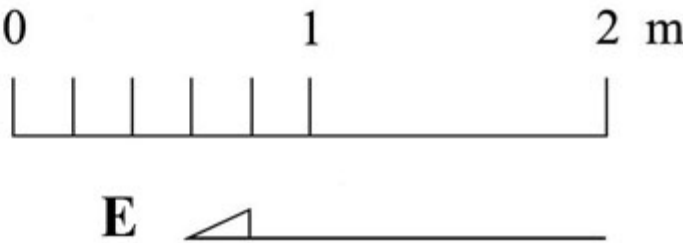
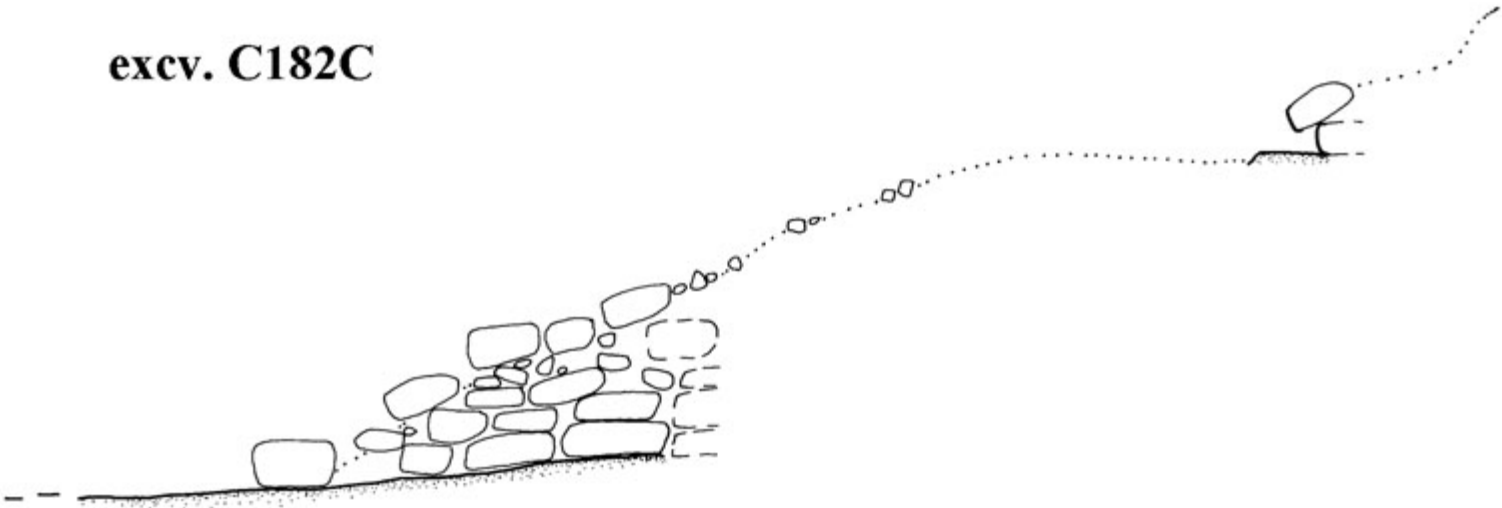




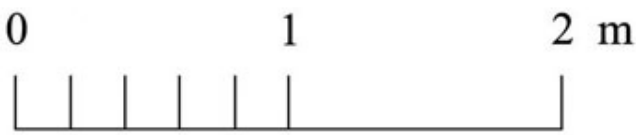
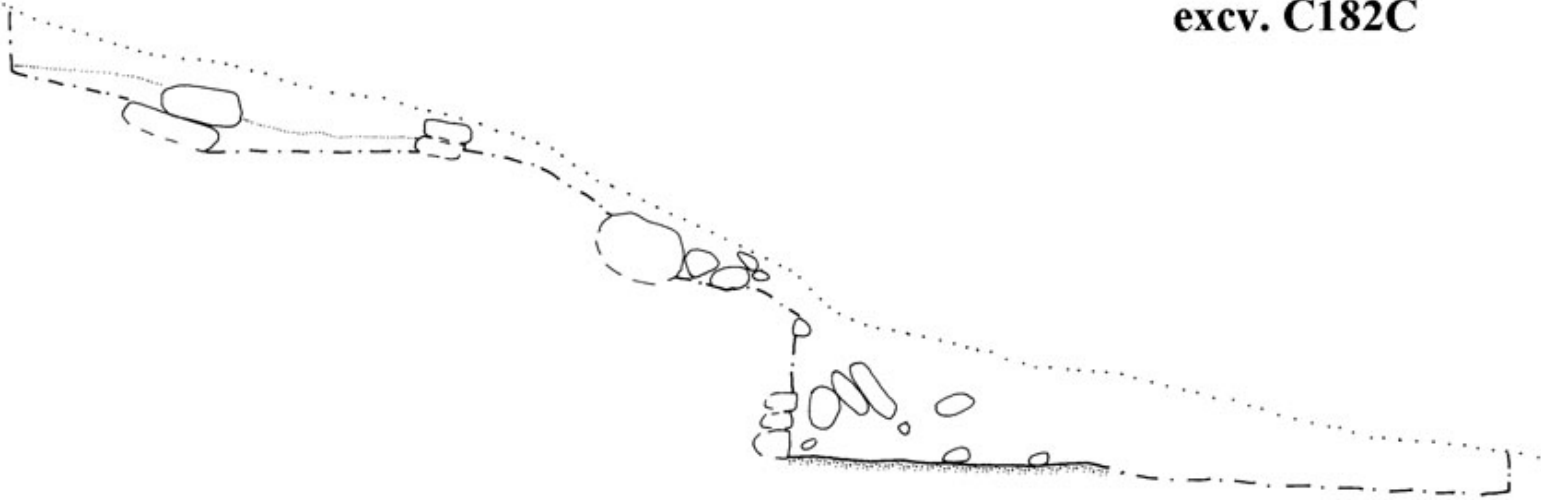
**excav. C182B**



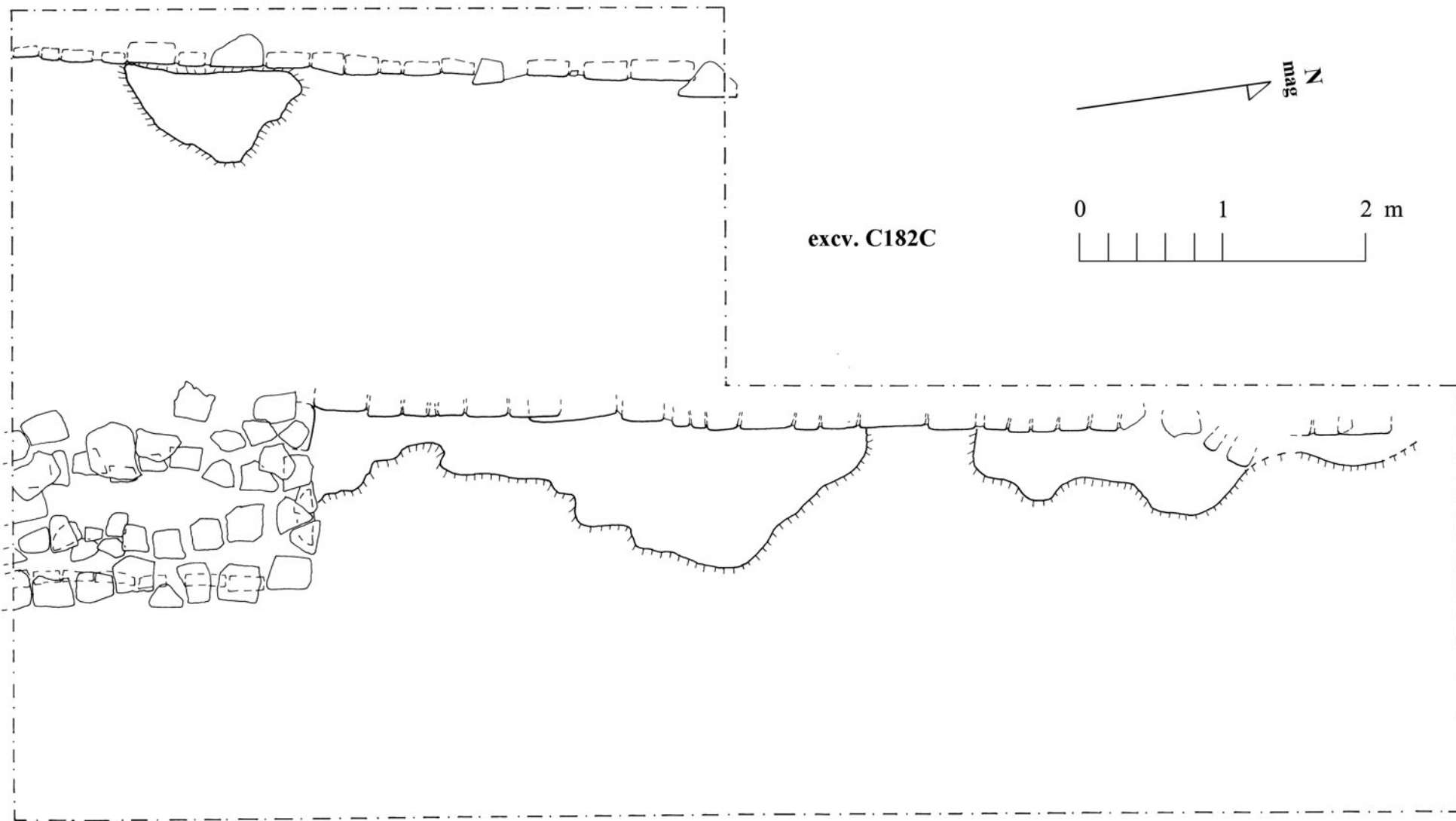
**excv. C182C**



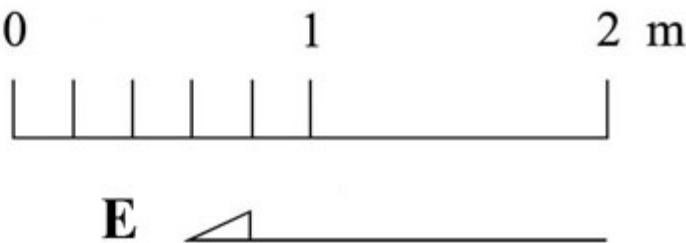
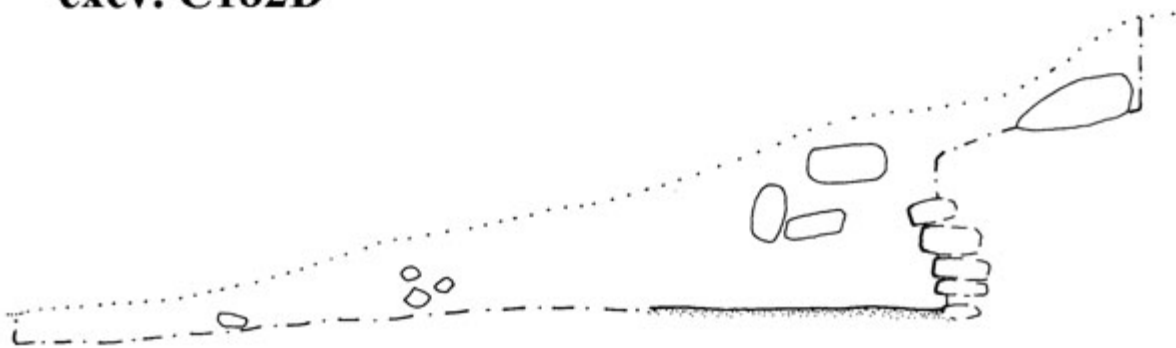
**excv. C182C**



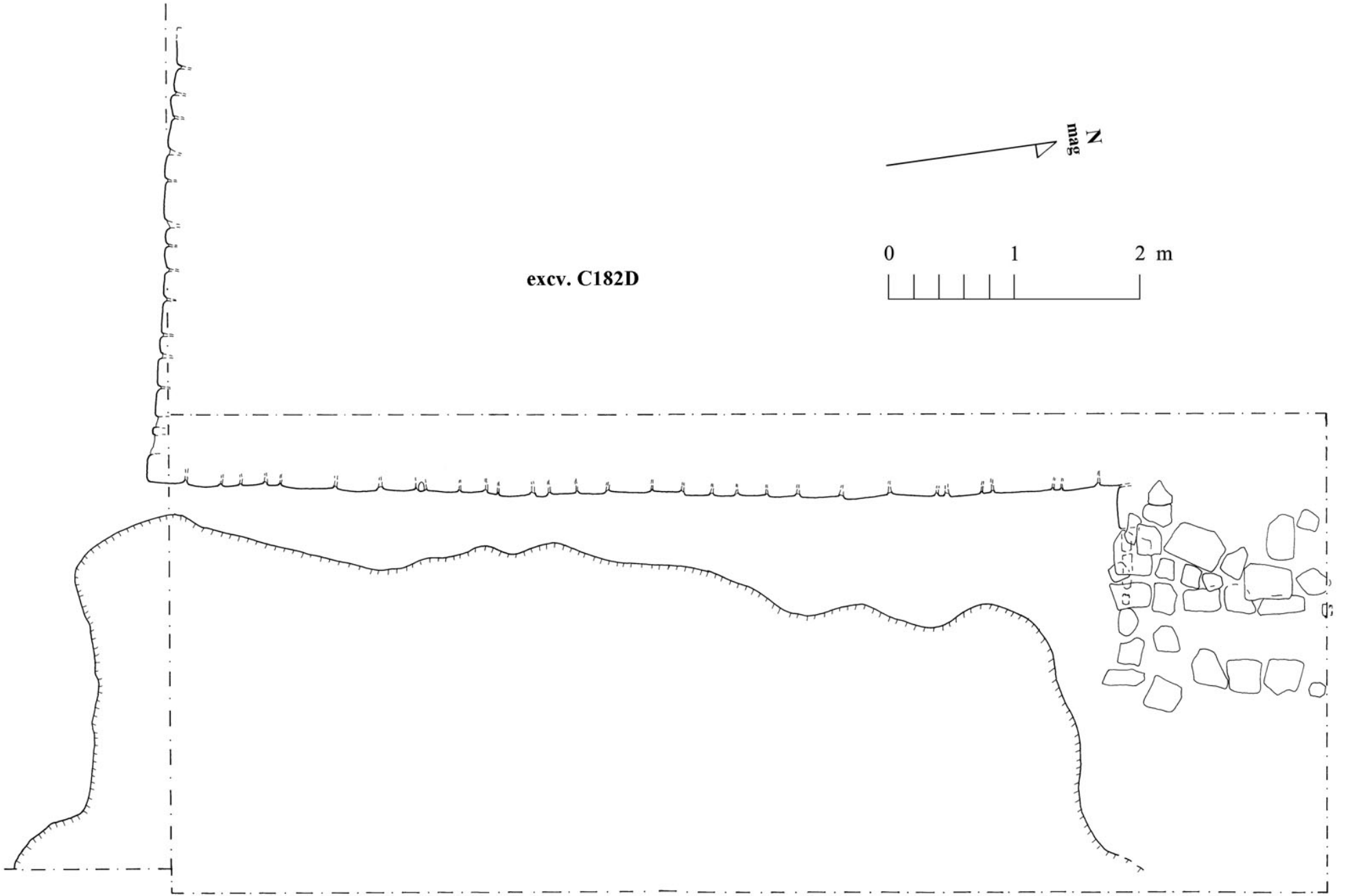
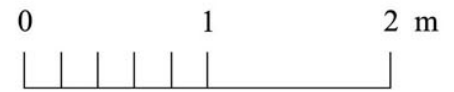


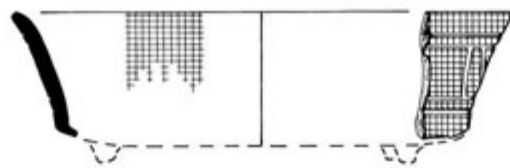


**excv. C182D**

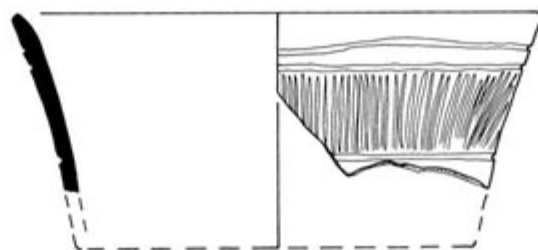


**excv. C182D**



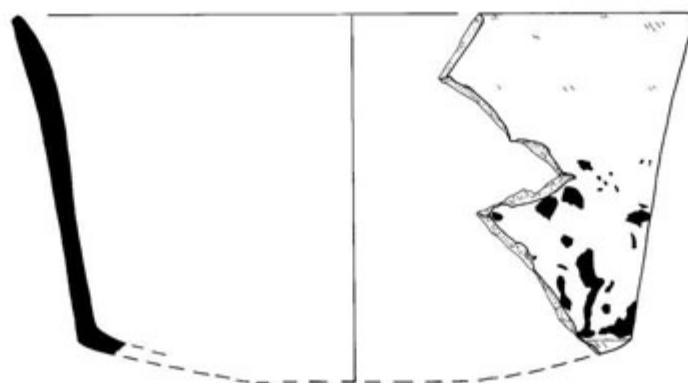


**a**



**b**

0 1 2 cm



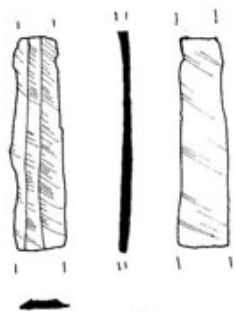
**c**



**d**



**e**



a



b



c



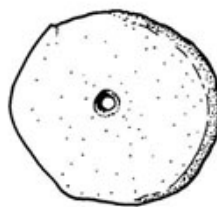
d



e



f



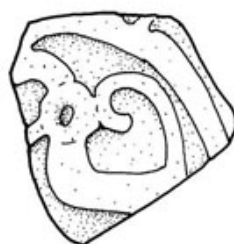
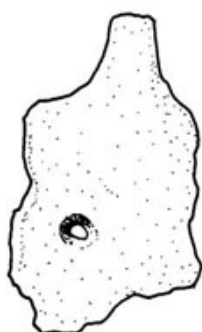
g



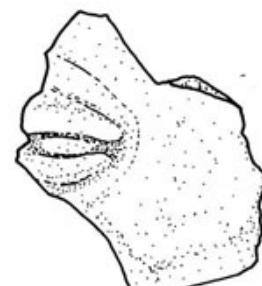
h



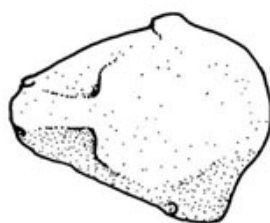
i



j



k



0 1 2 cm



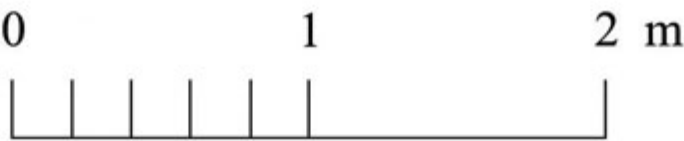
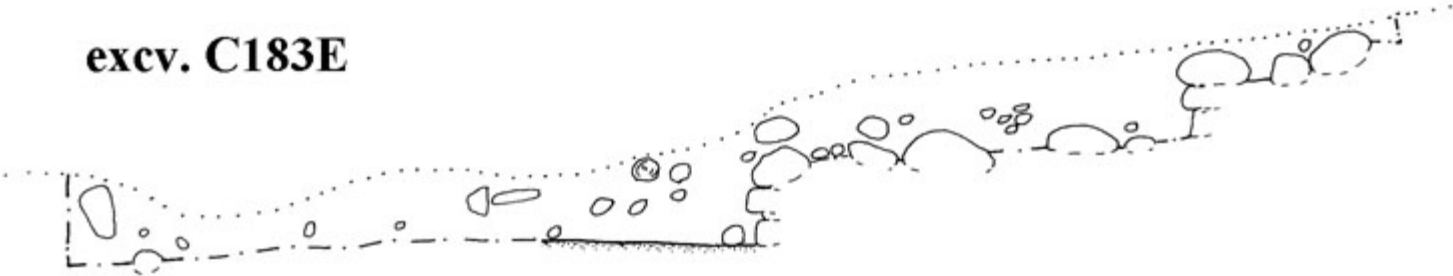




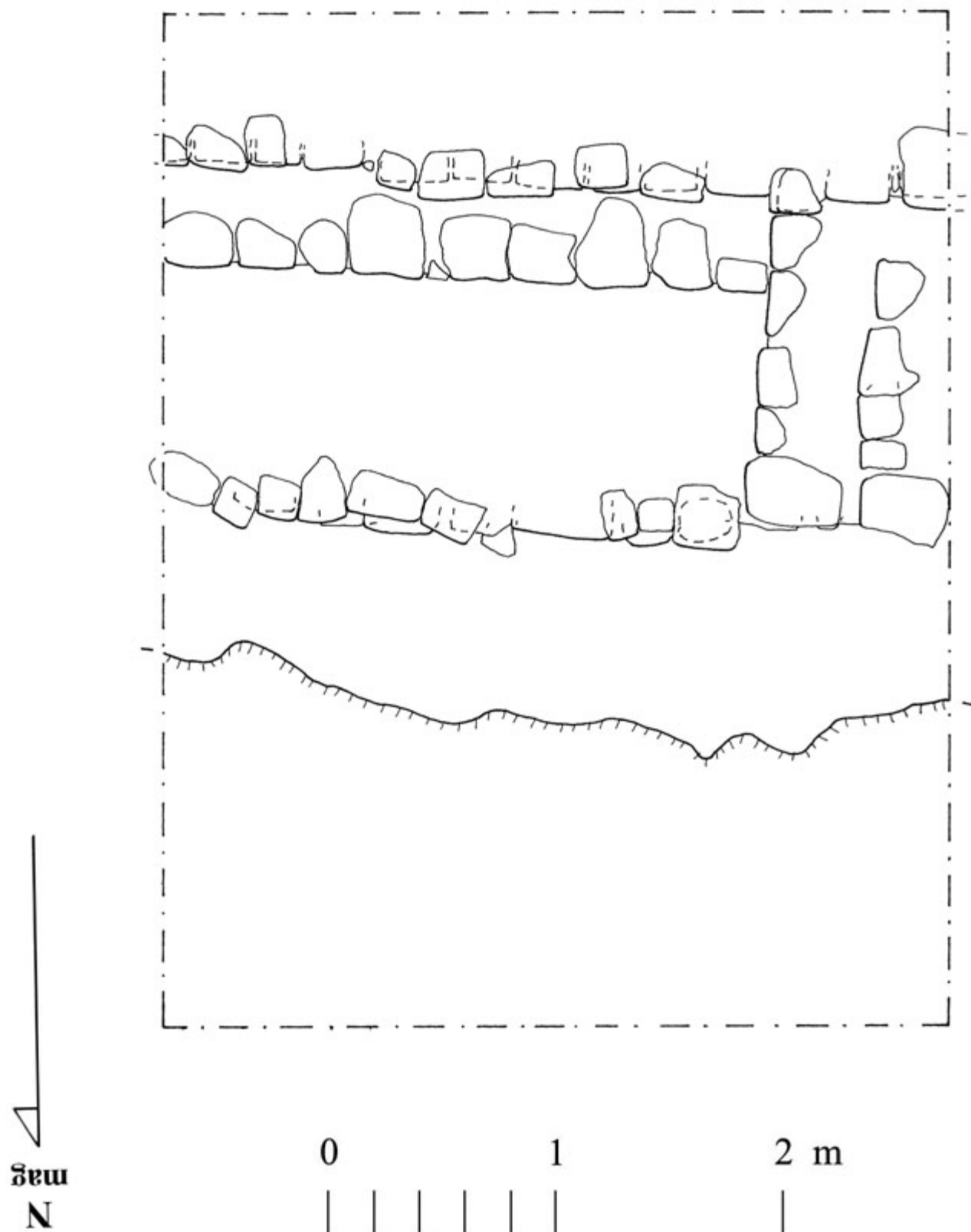




**excv. C183E**

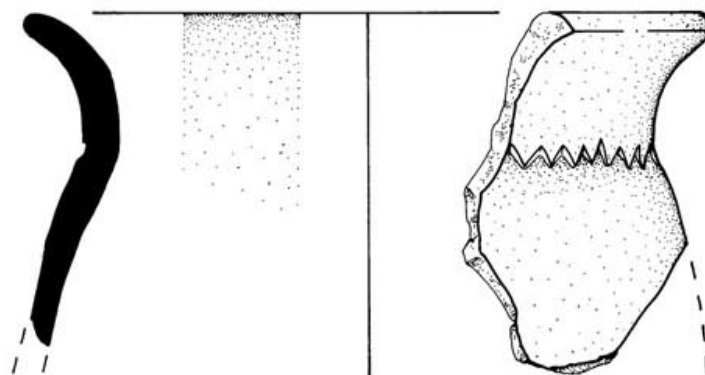
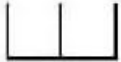


**excv. C183E**

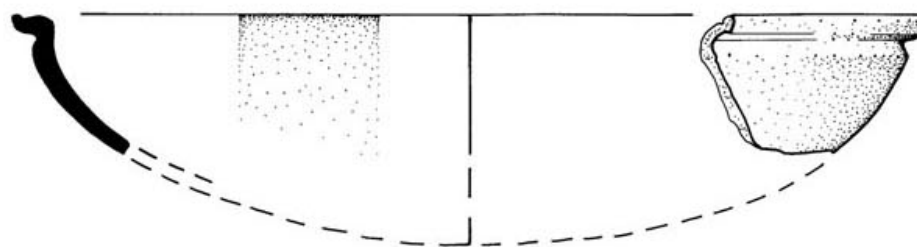




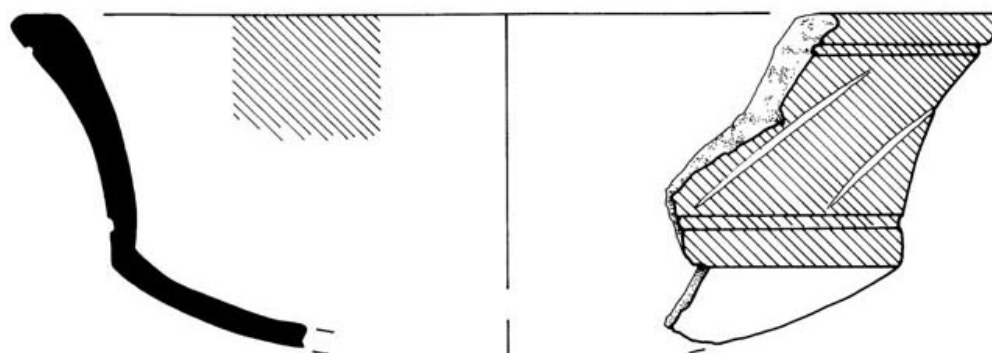
0 1 2 cm



**a**

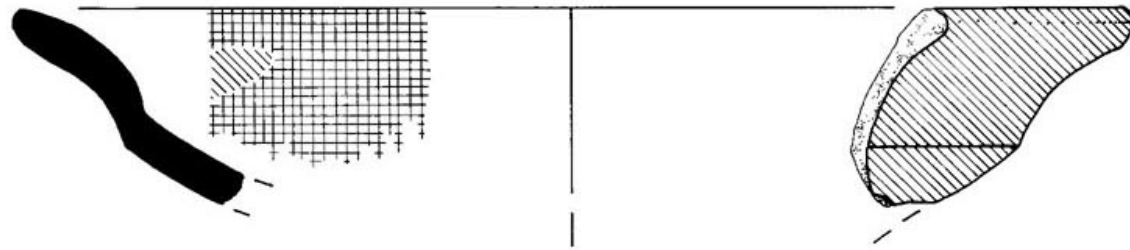


**b**

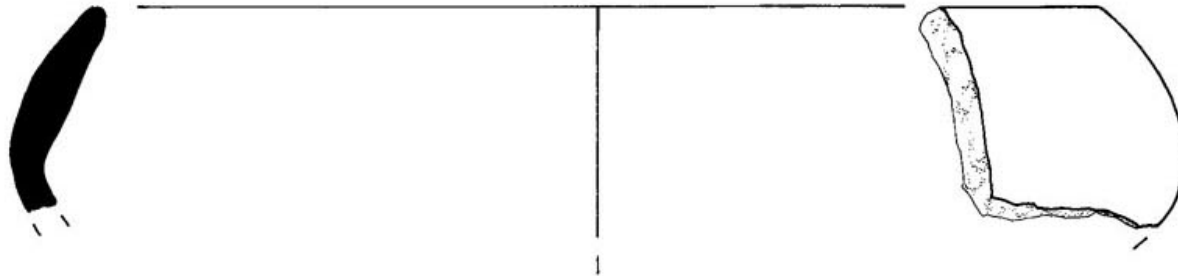




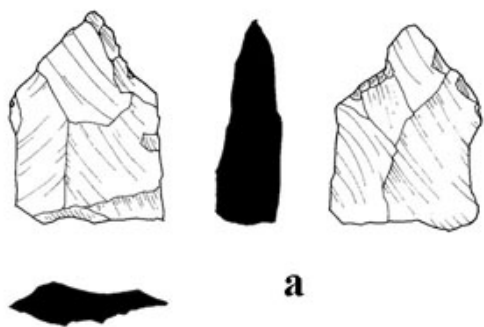
**c**



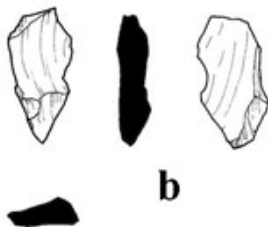
**d**



**e**



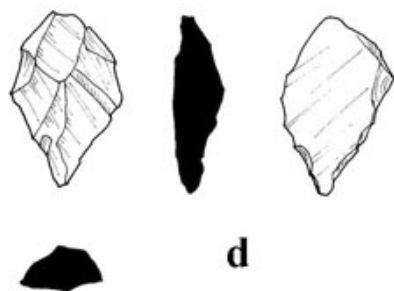
**a**



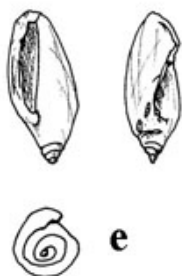
**b**



**c**



**d**



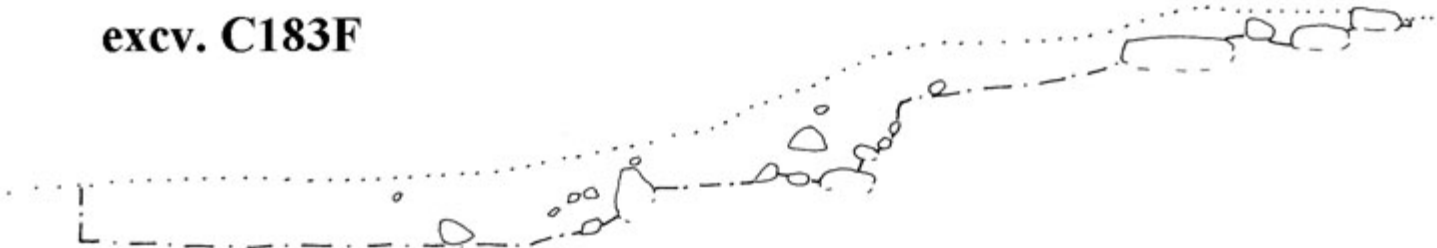
**e**

0 1 2 cm





**excv. C183F**



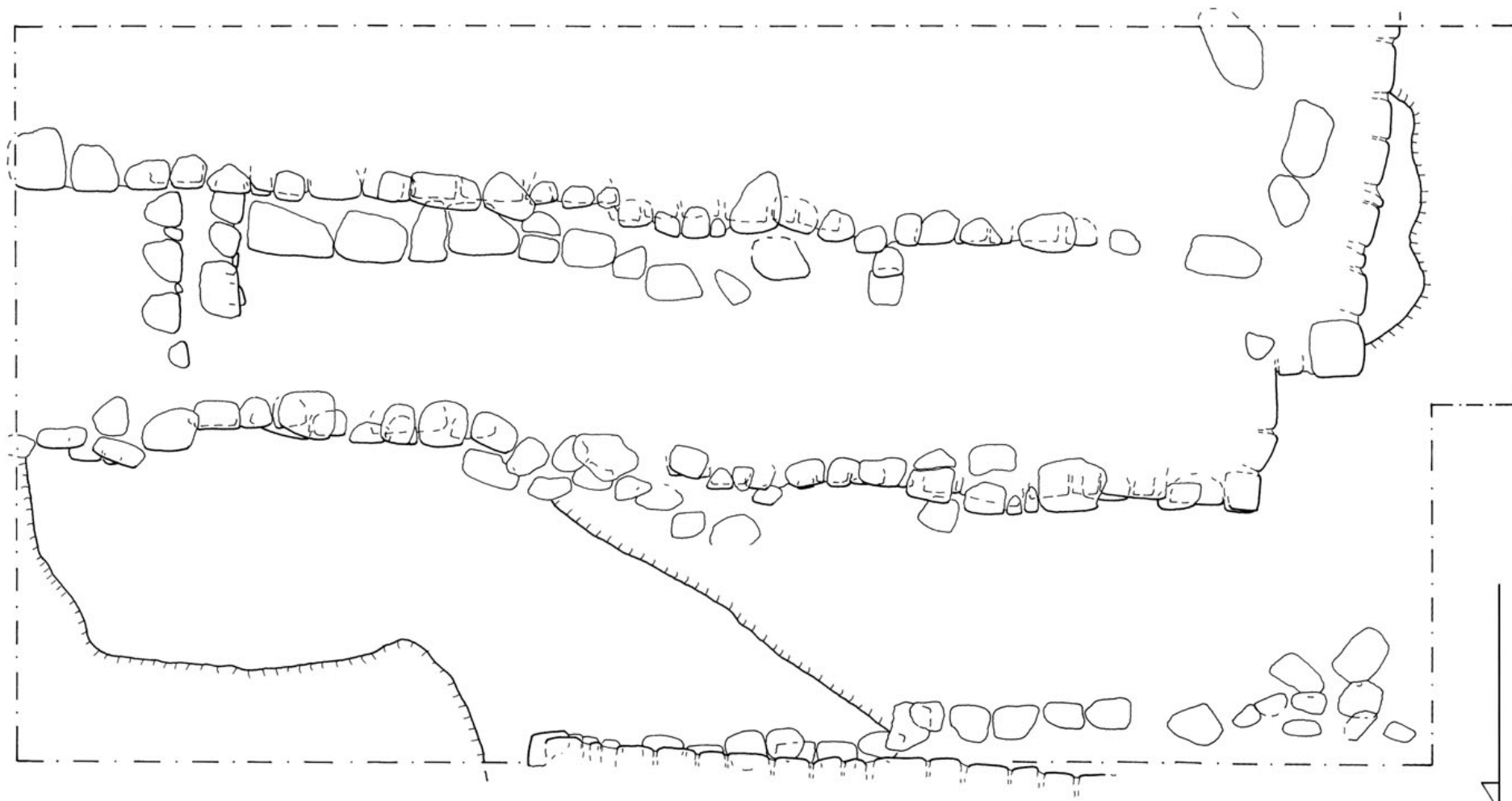
0 1 2 m



N





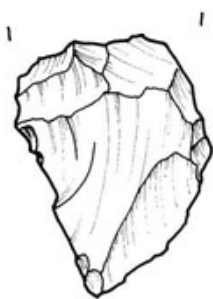


excav. C183F

0 1 2 m

↑  
N





**a**



**b**



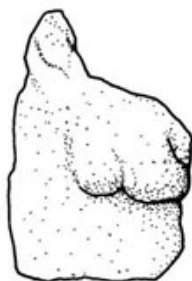
**c**



**d**



**e**



**f**



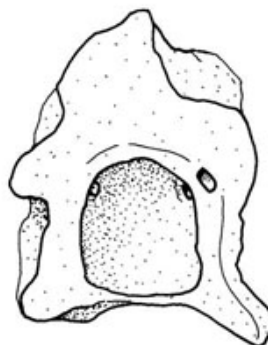
**g**



0 1 2 cm



**h**

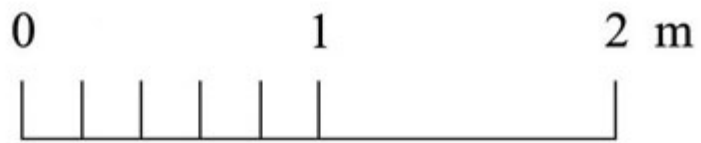
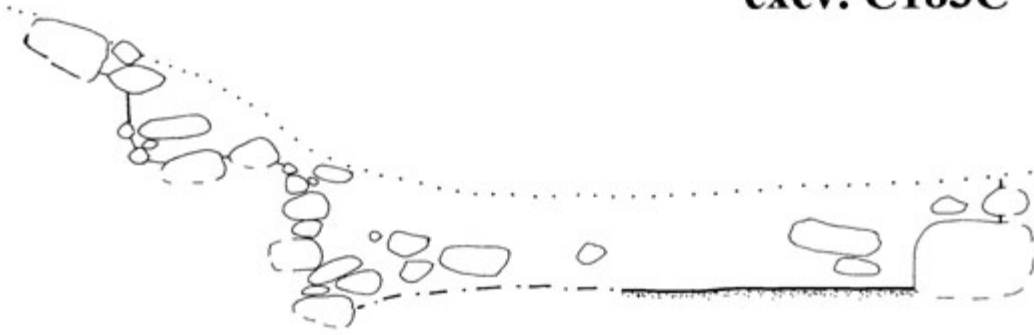




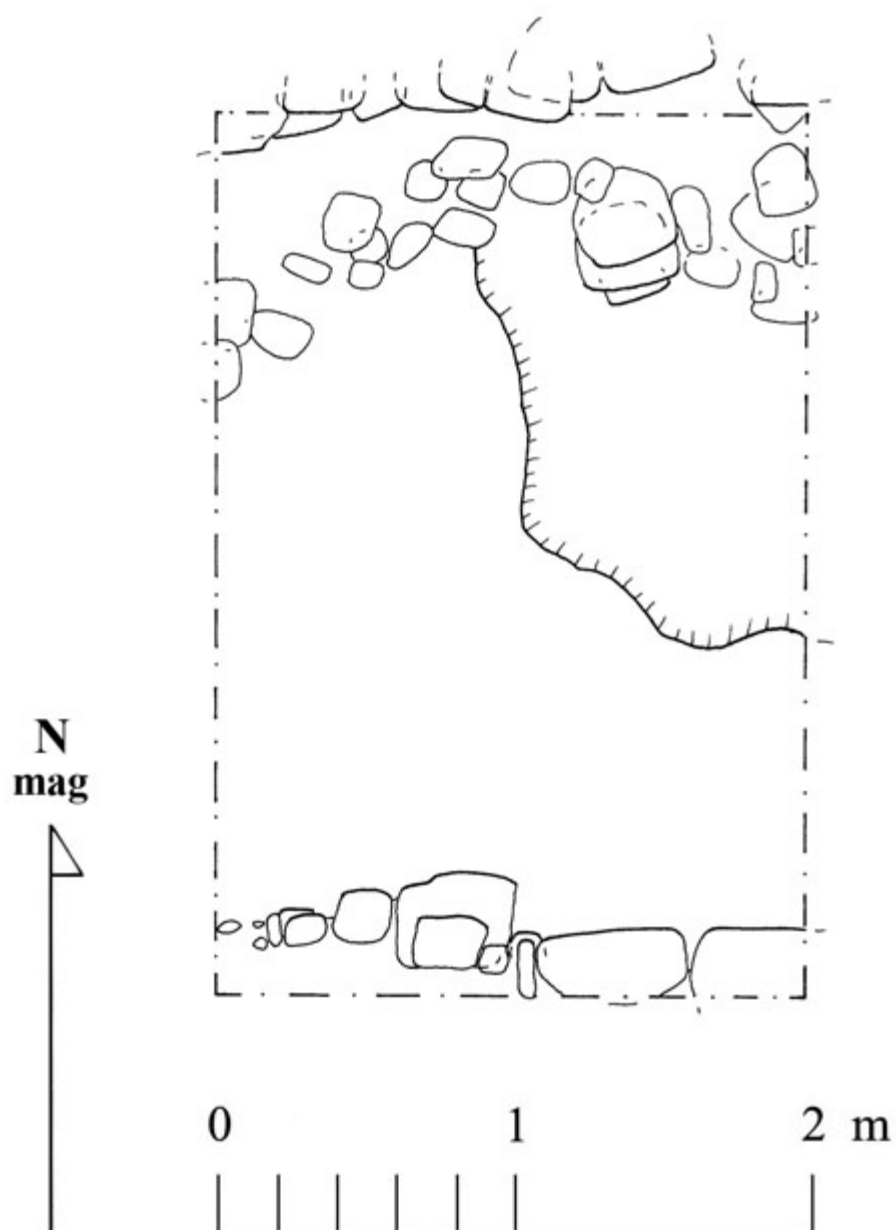




**excv. C183C**



**excv. C183C**

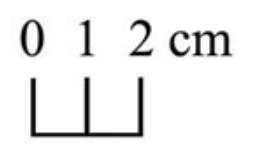




**a**



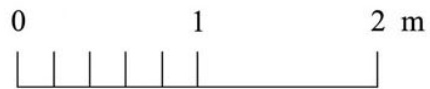
**b**

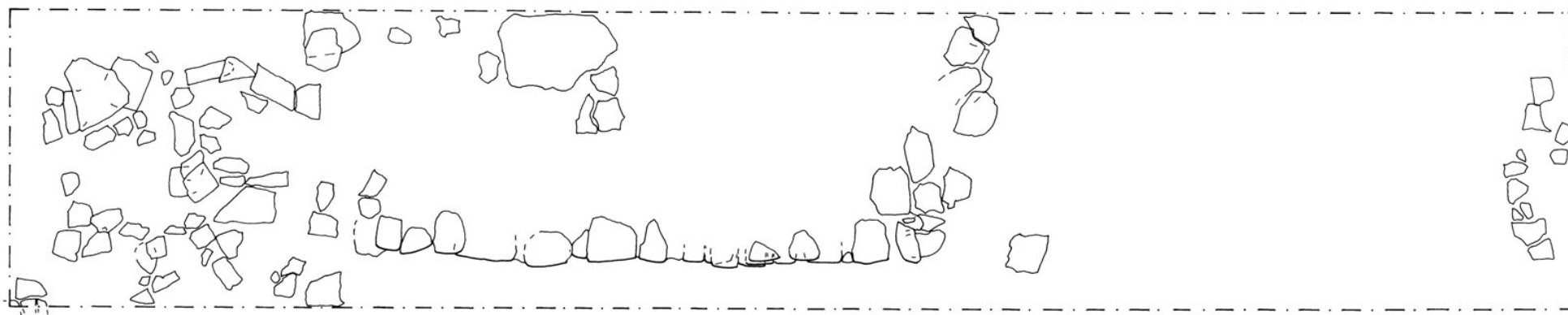






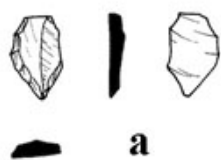
**excv. C183D**



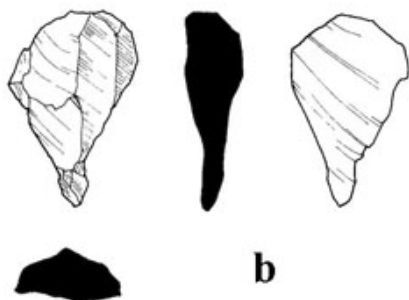


**excav. C183D**

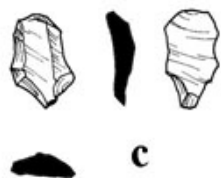




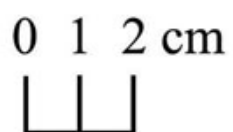
**a**



**b**



**c**



| |



| |



| |

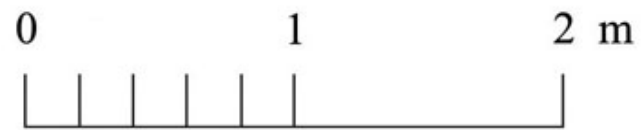
**d**



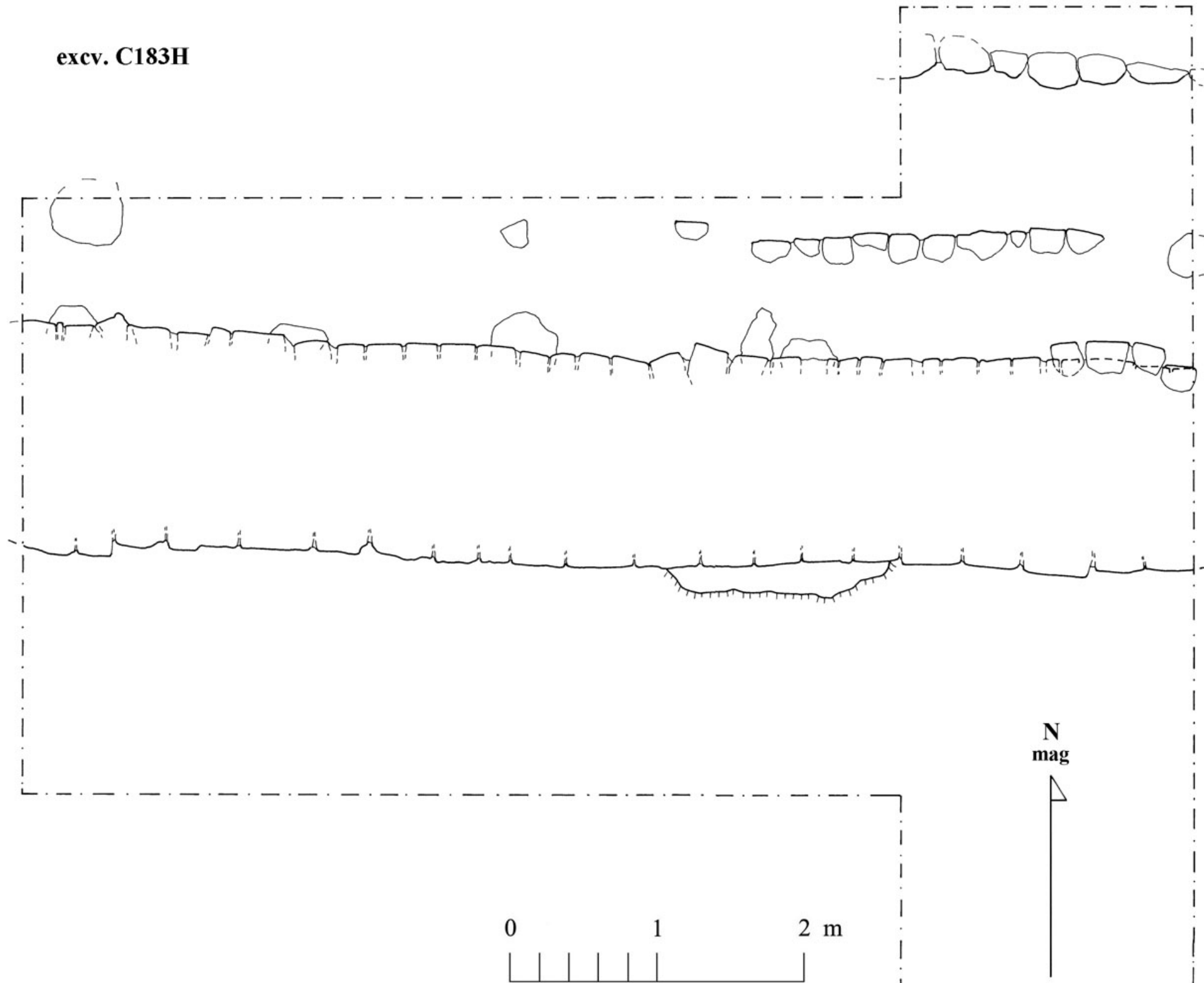




**excv. C183H**

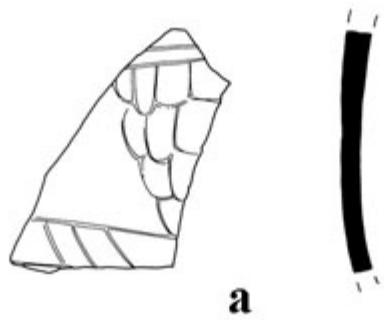


excv. C183H



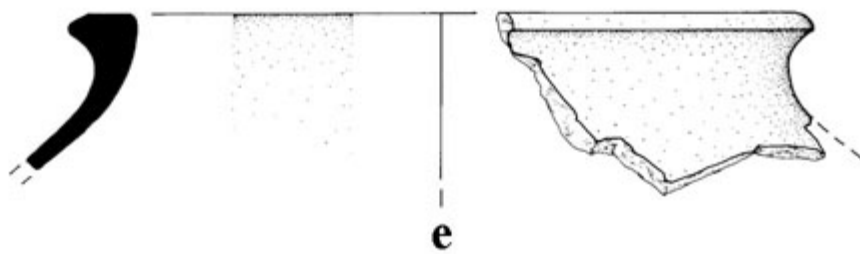
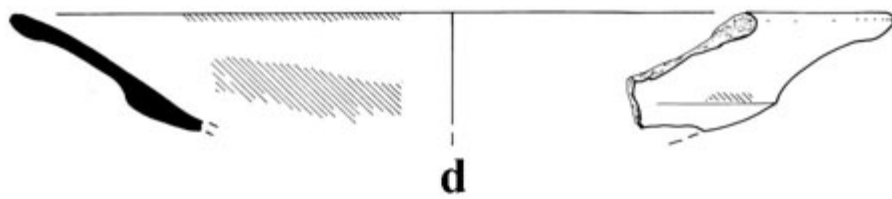
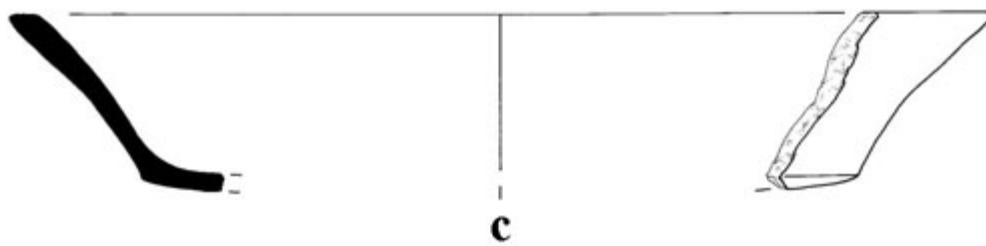
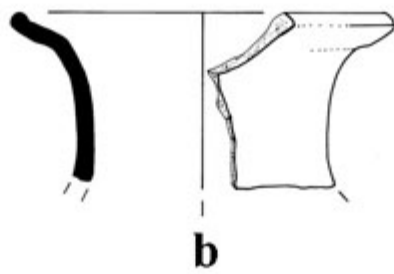
**Figure 67: Plan of Operation C183H.**

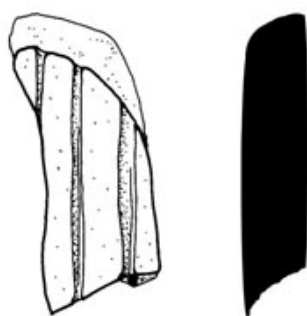




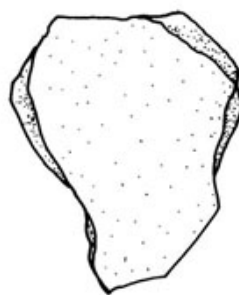
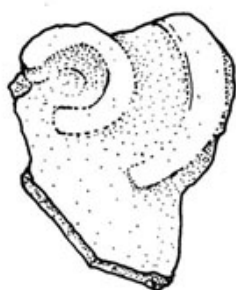
0 1 2 cm

A scale bar with three segments, labeled 0, 1, and 2 cm.





**a**



**b**



**c**



**e**



**d**



**f**



0 1 2 cm

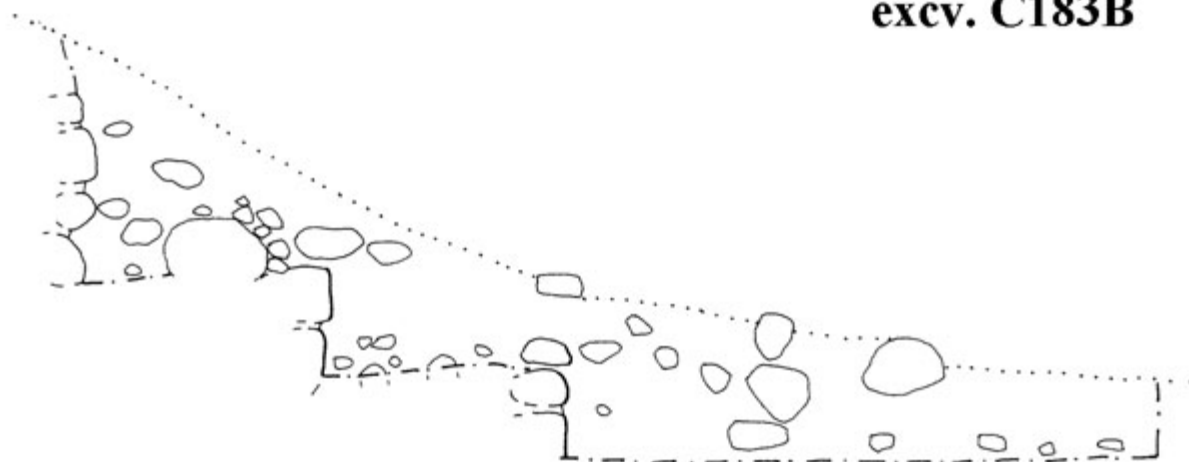




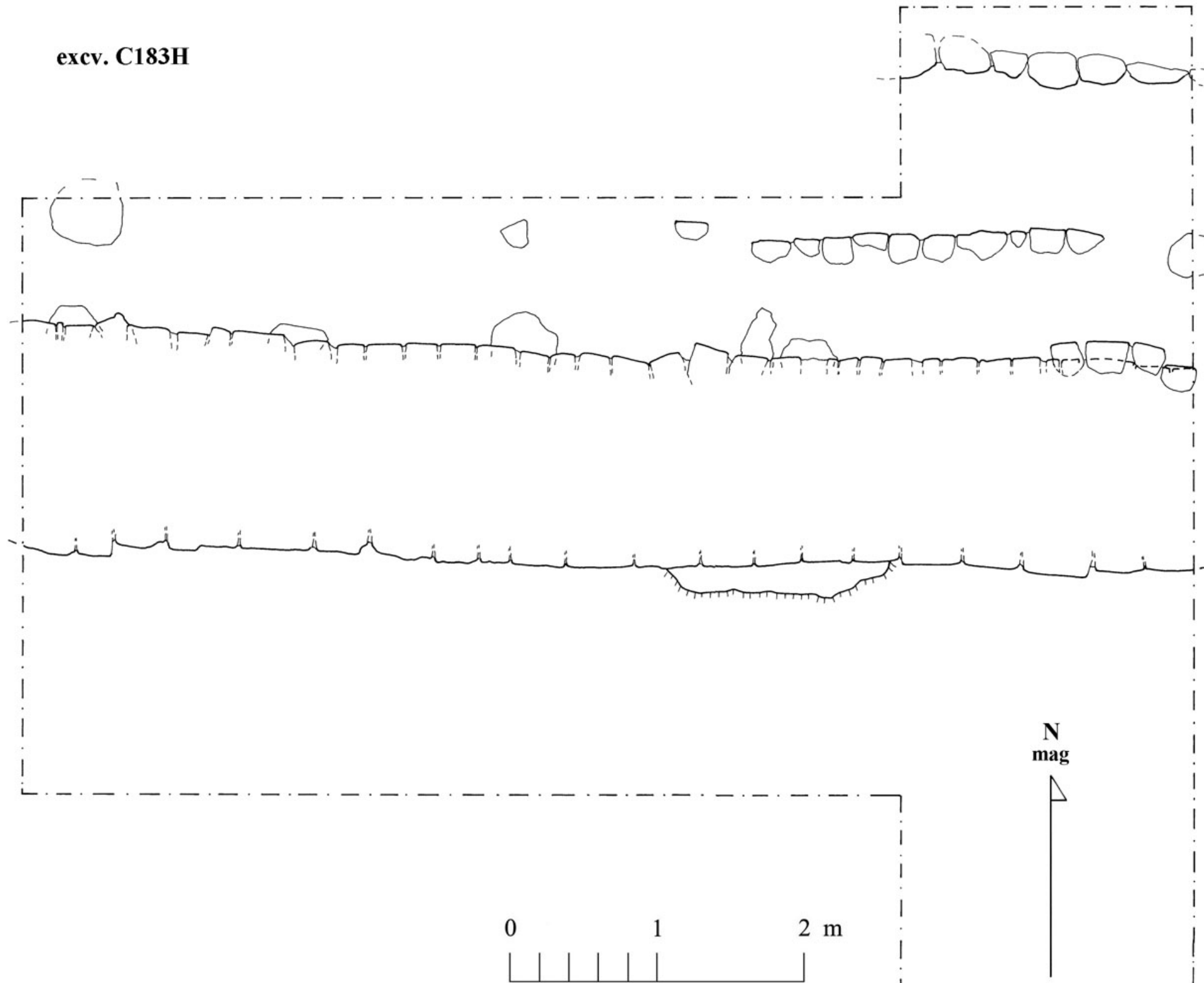




**excv. C183B**

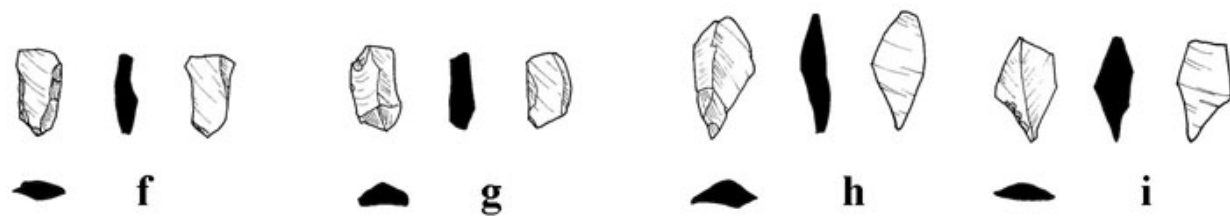
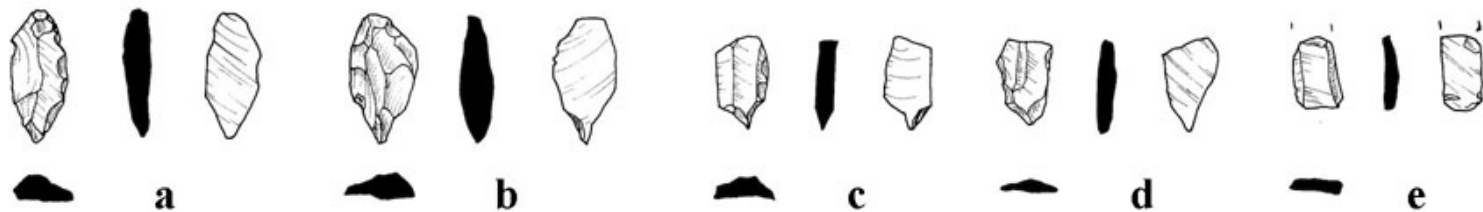


excv. C183H



**Figure 67: Plan of Operation C183H.**





0 1 2 cm

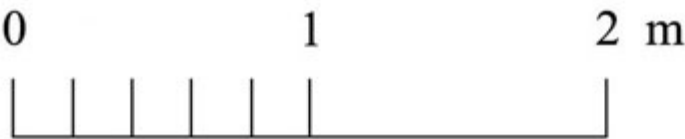
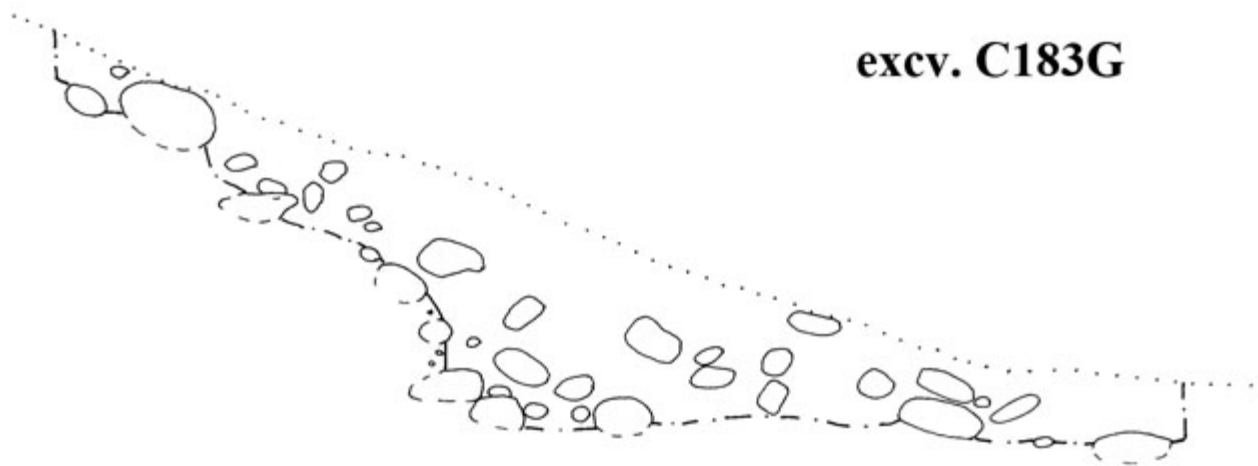






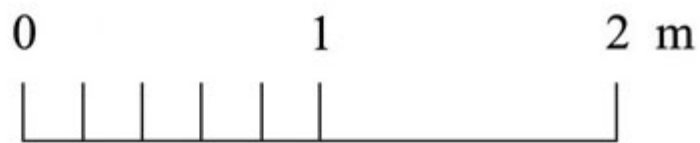
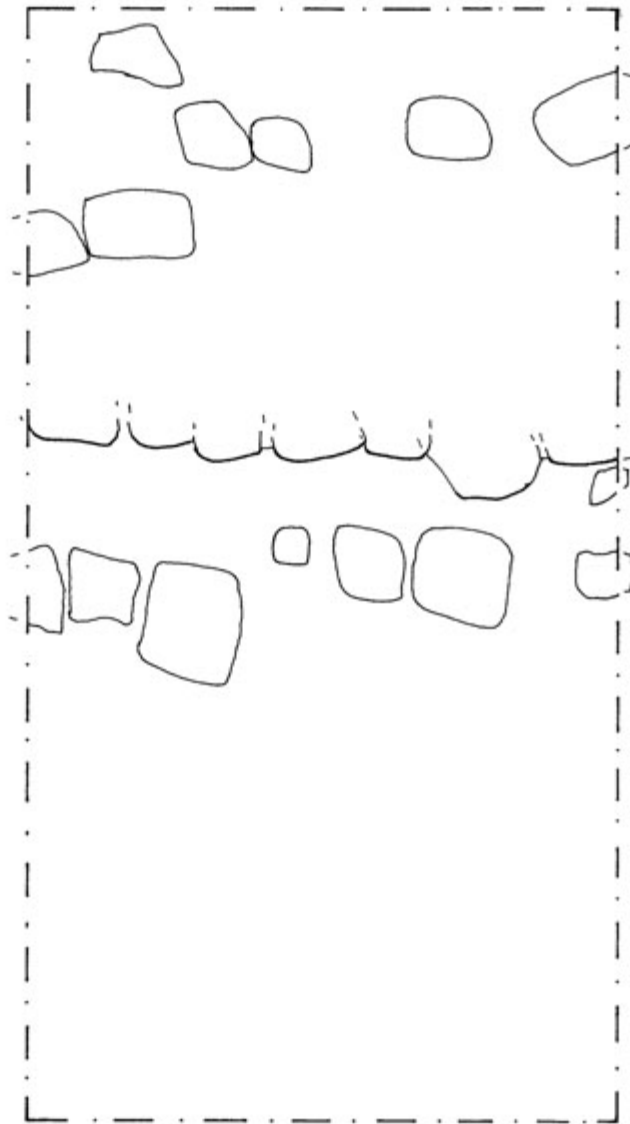


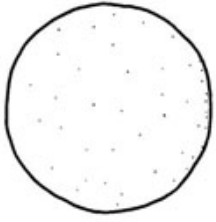
**excv. C183G**



**excv. C183G**

**N**  
**mag**





**a**



**b**



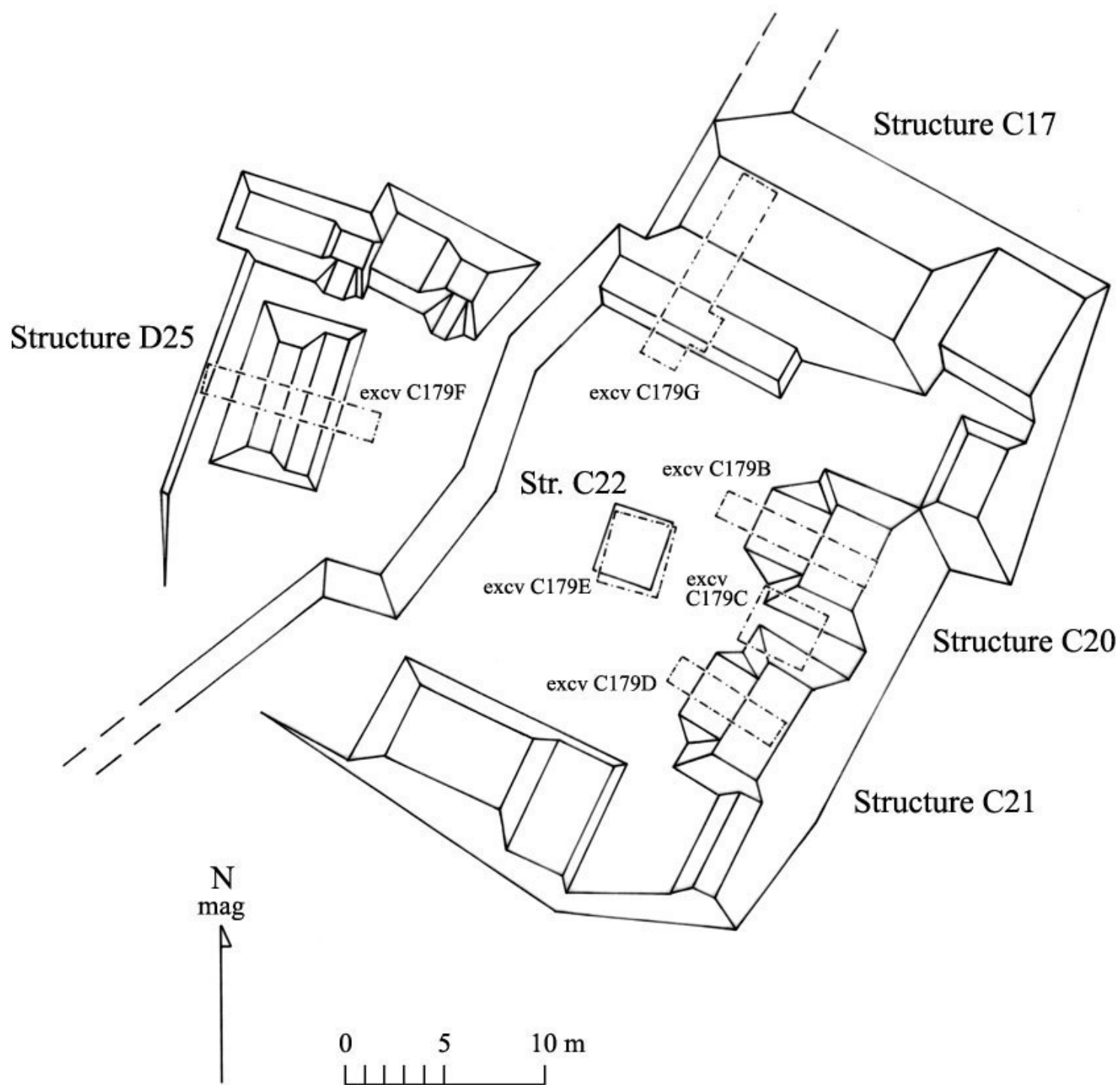
**c**



0 1 2 cm  
└─┴─┘



# “Culebras”



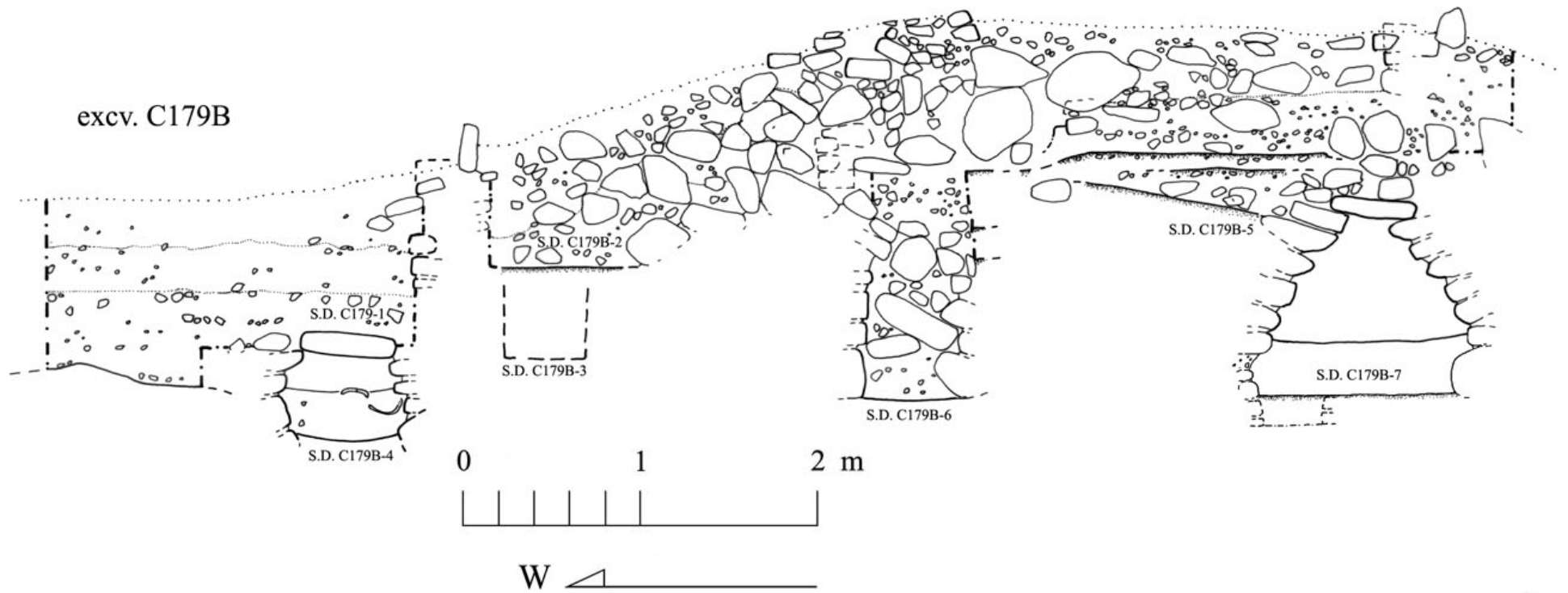








# CARACOL Structure C20

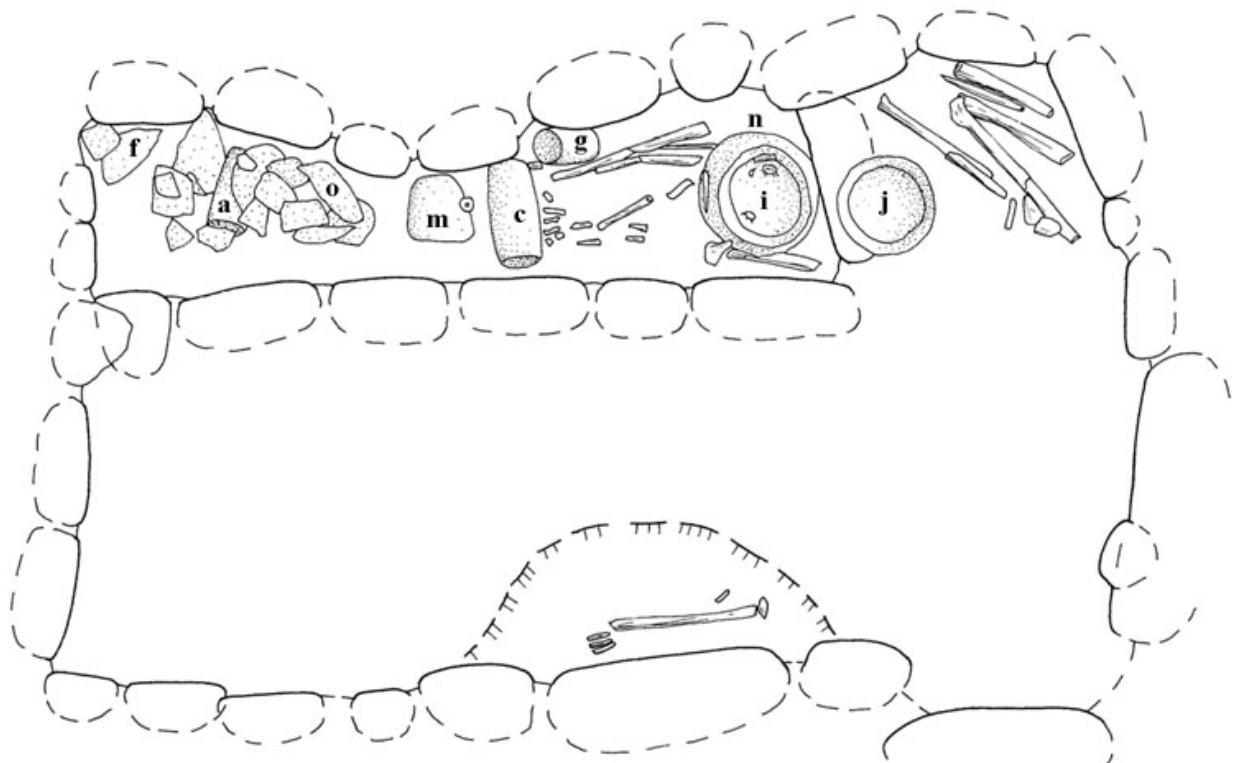
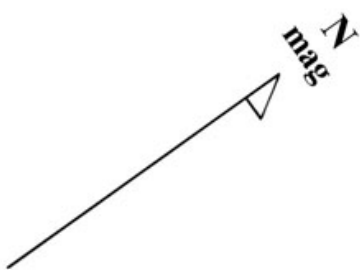
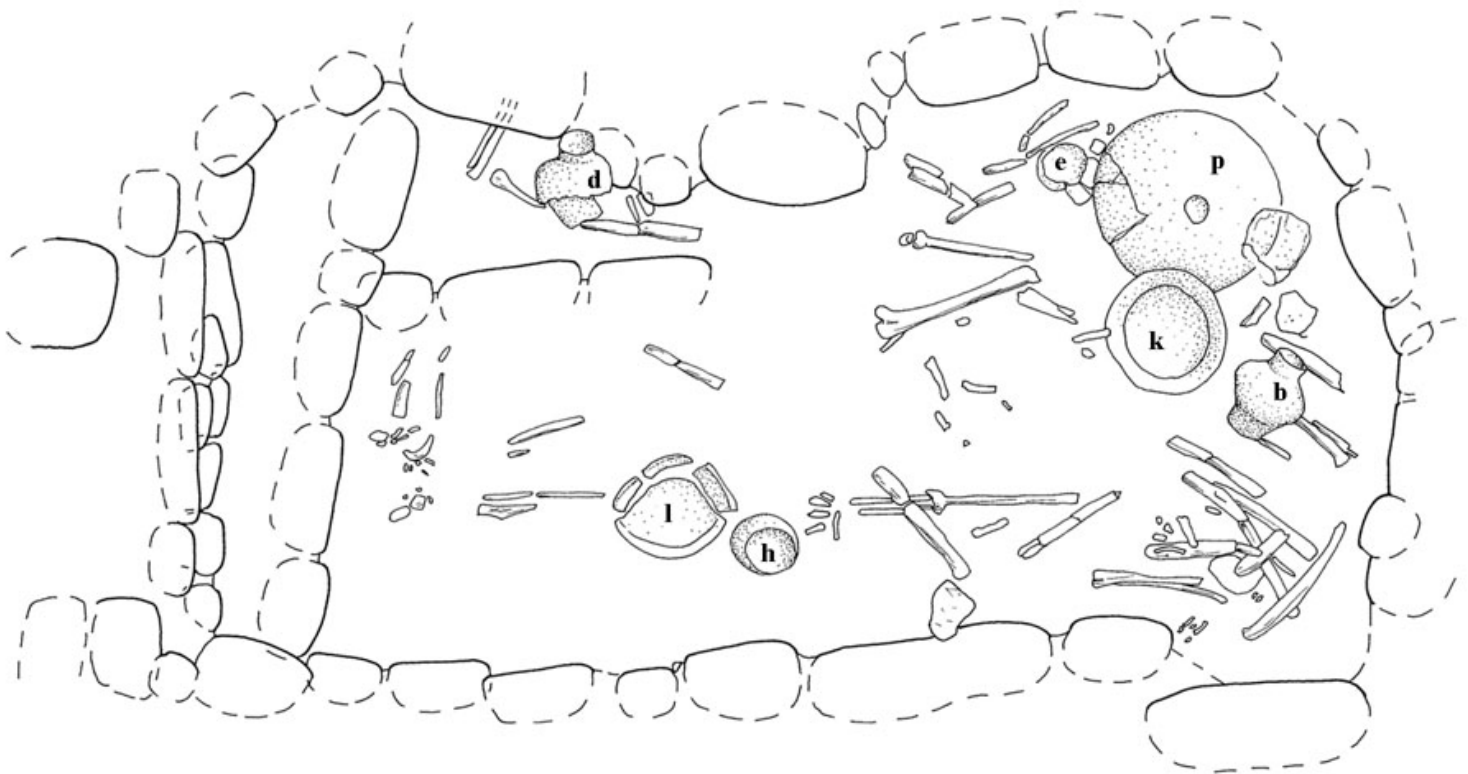






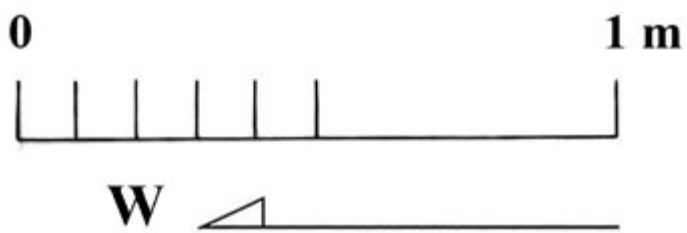
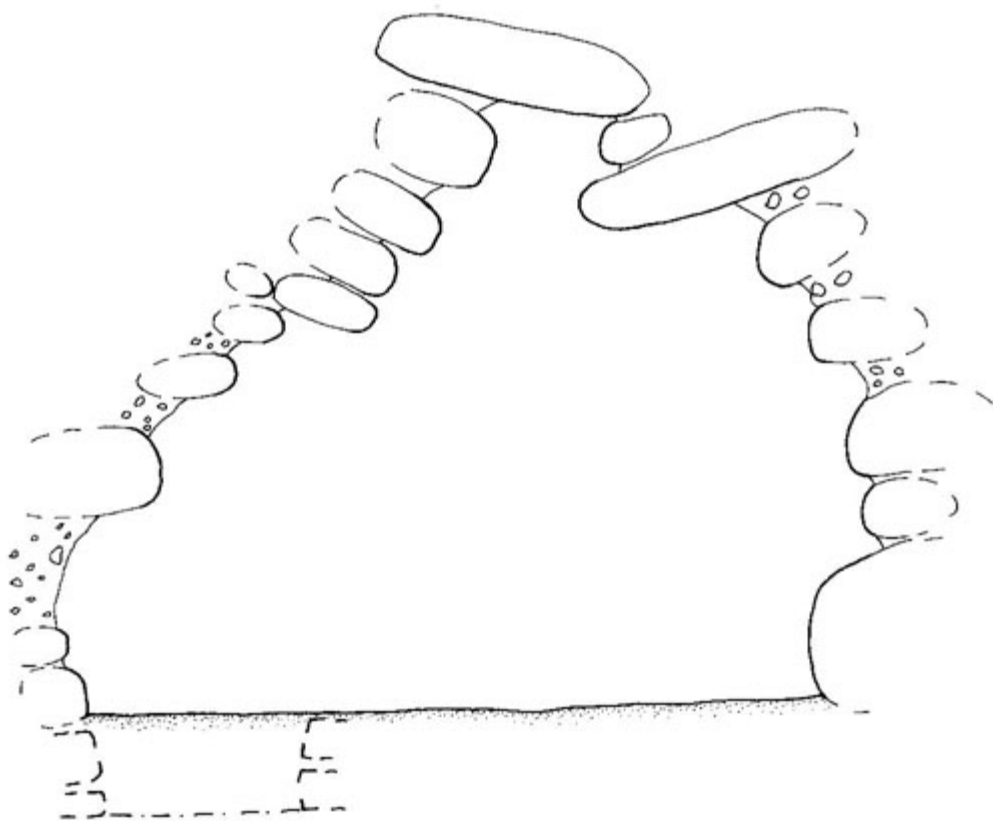


SD C179B-7 upper plan

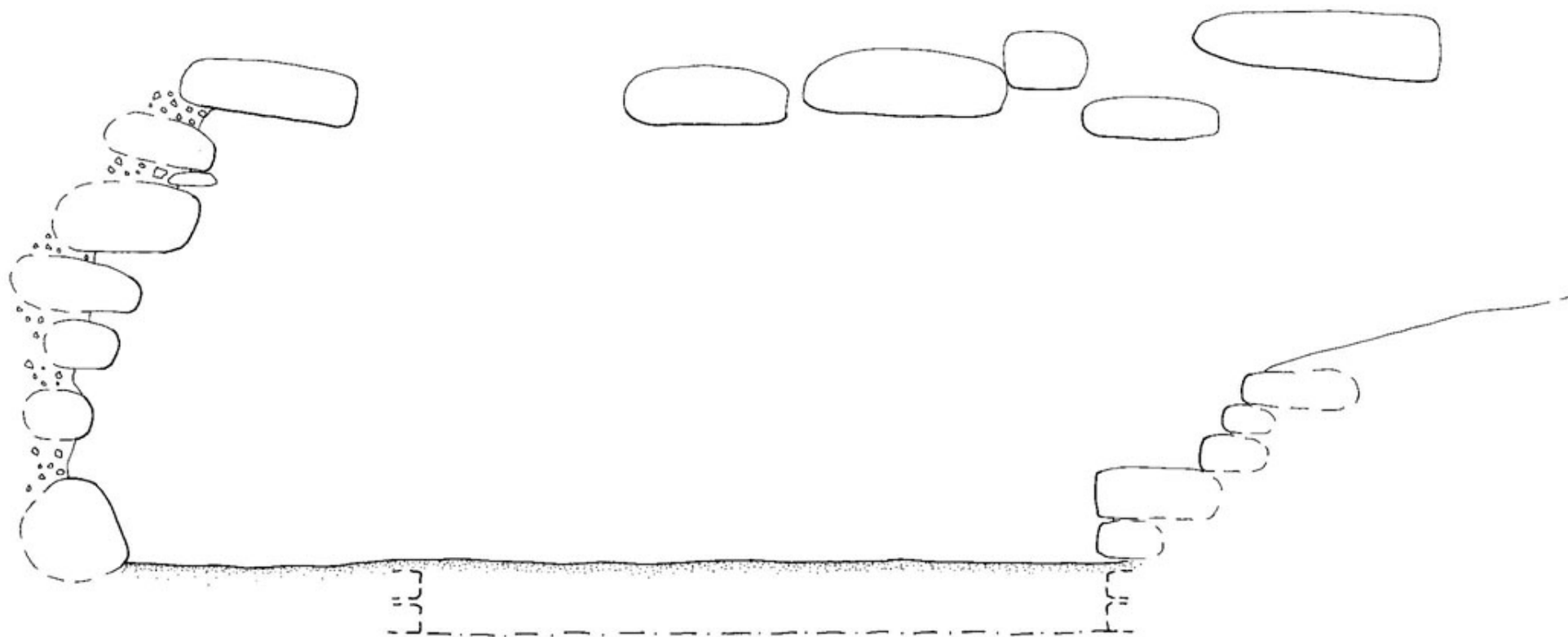


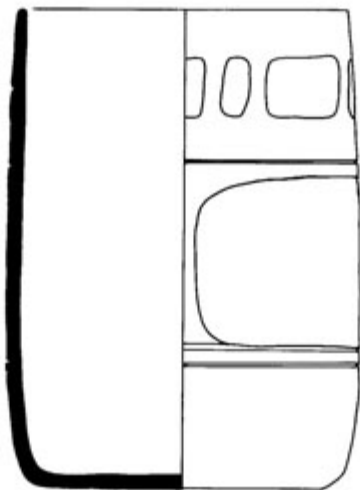
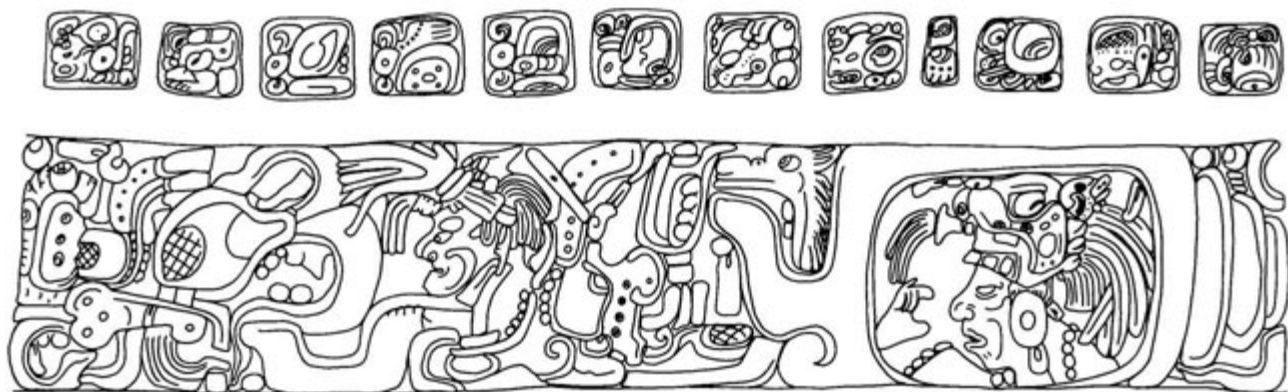
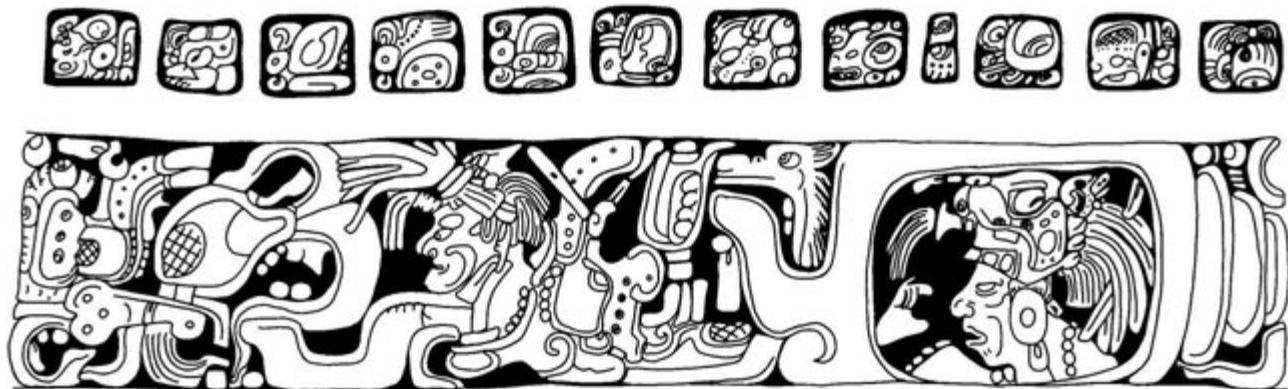


**SD C179B-7 lower plan**

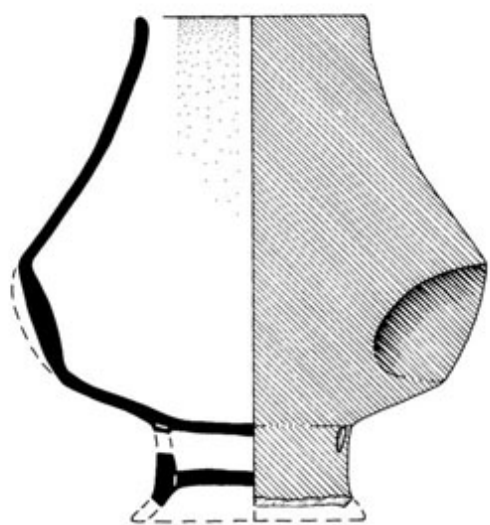




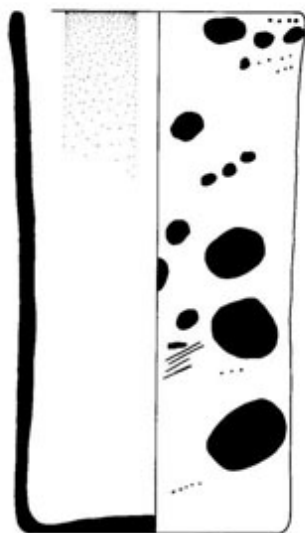




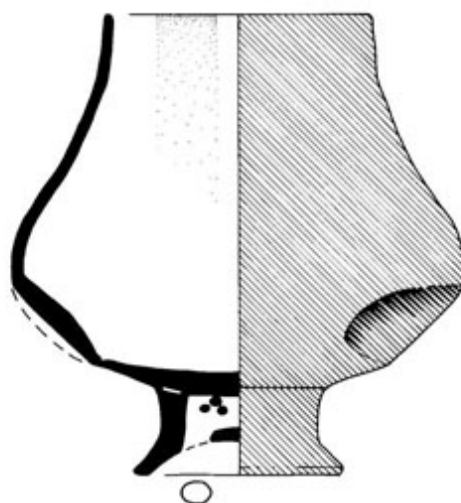
**a**



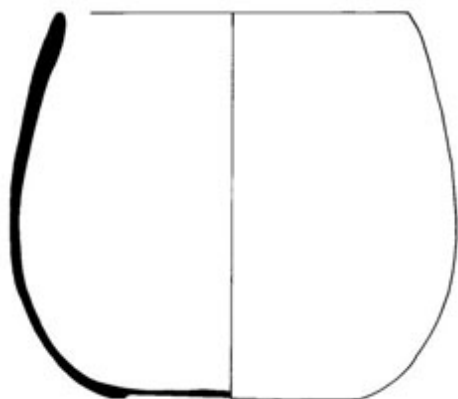
b



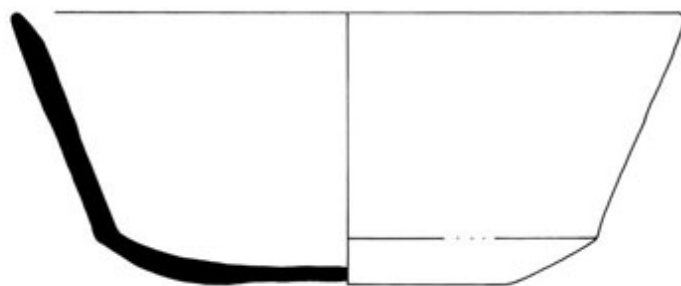
c



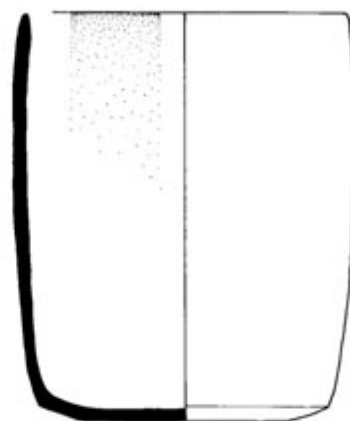
d



e



f



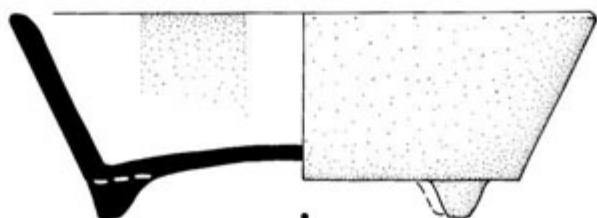
g



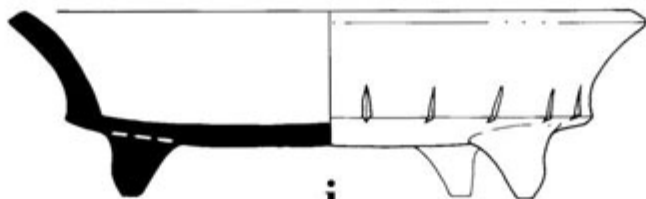


**h**

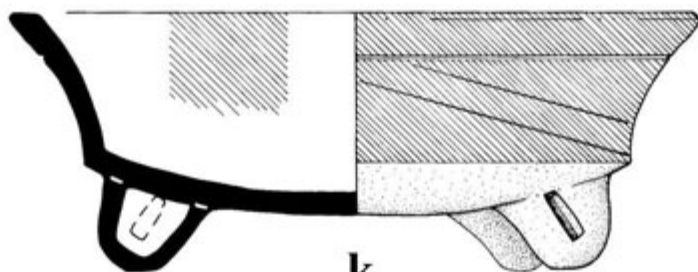




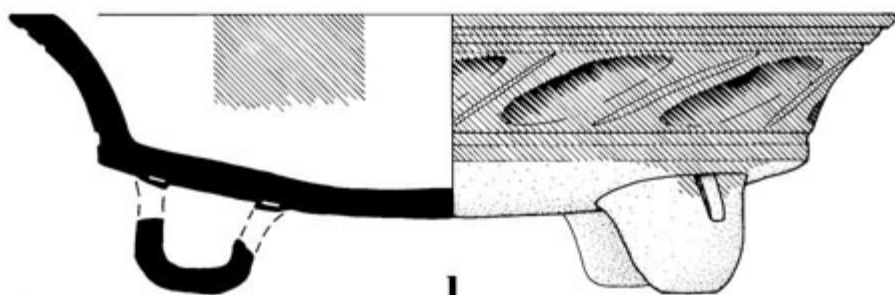
i



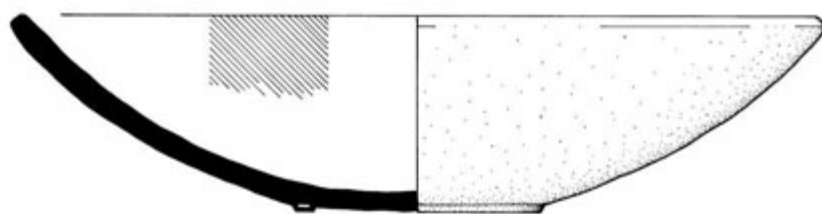
j



k



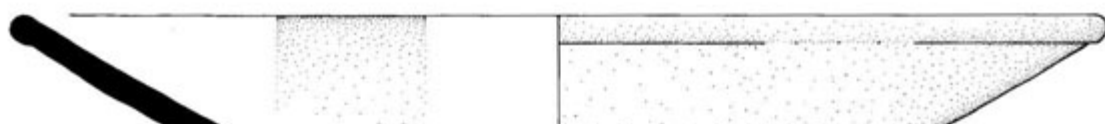
l

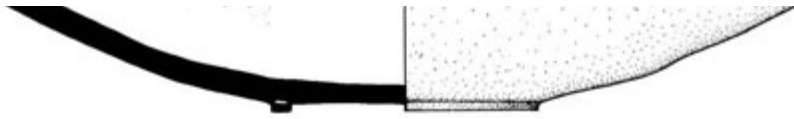


m

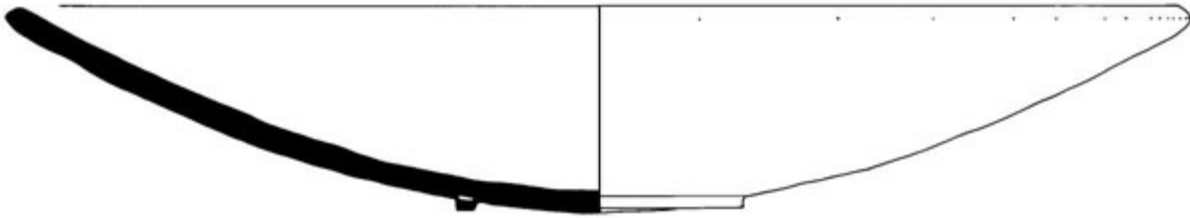


n





**o**



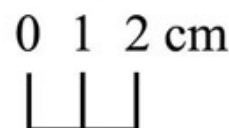
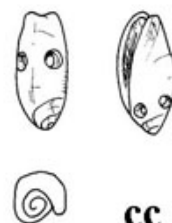
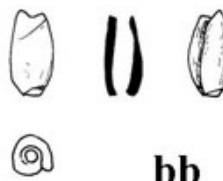
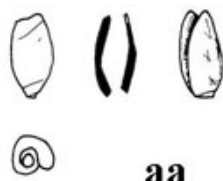
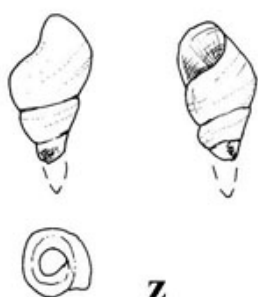
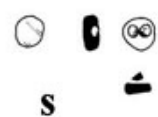
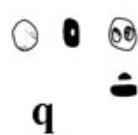
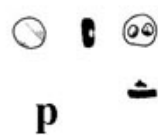
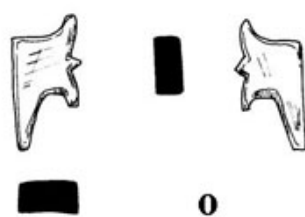
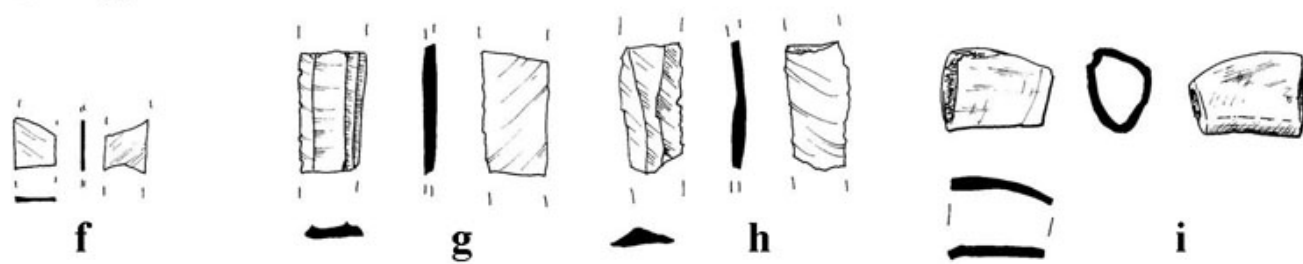
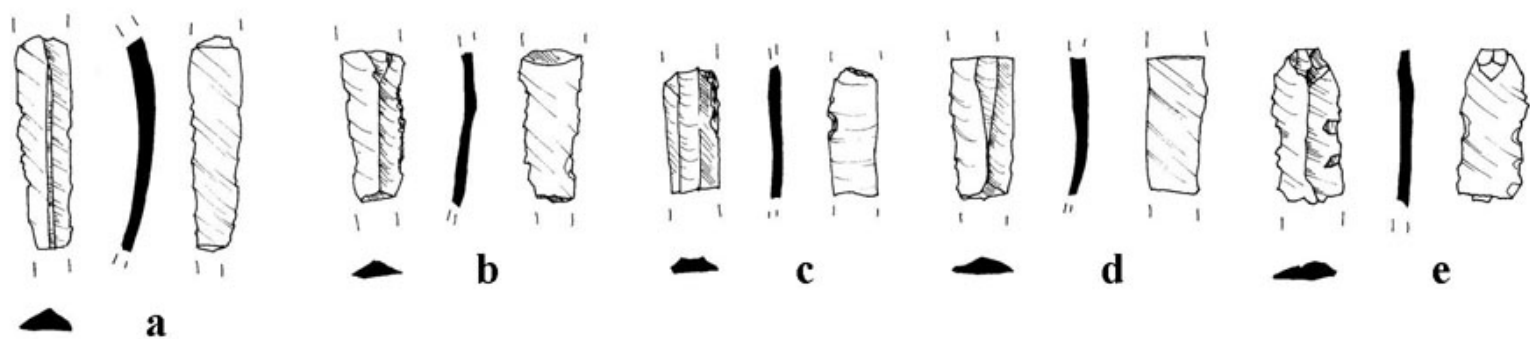
**p**



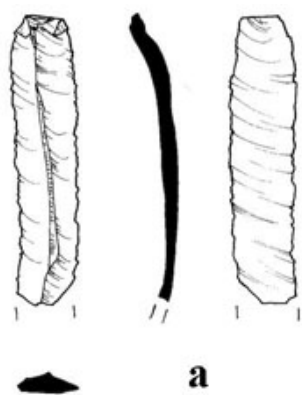




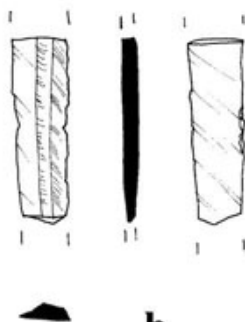




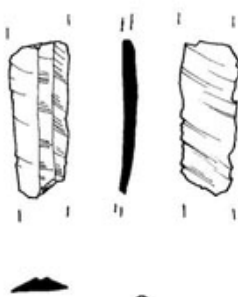




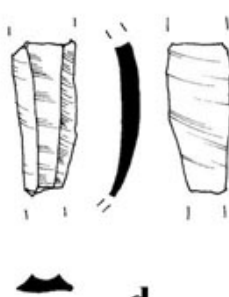
a



b



c



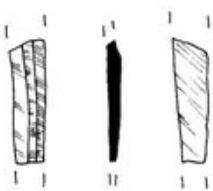
d



e



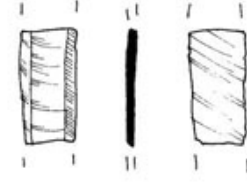
f



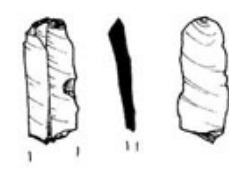
g



h



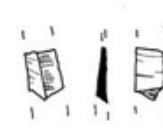
i



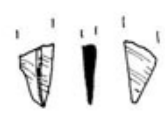
j



k



l



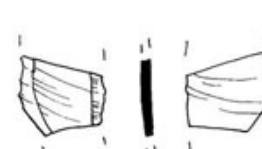
m



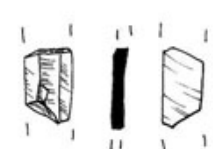
n



o



p



q



r



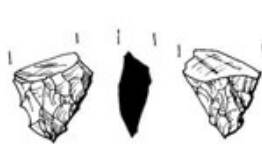
s



t



u



v



w



x



y



z



aa




bb



cc



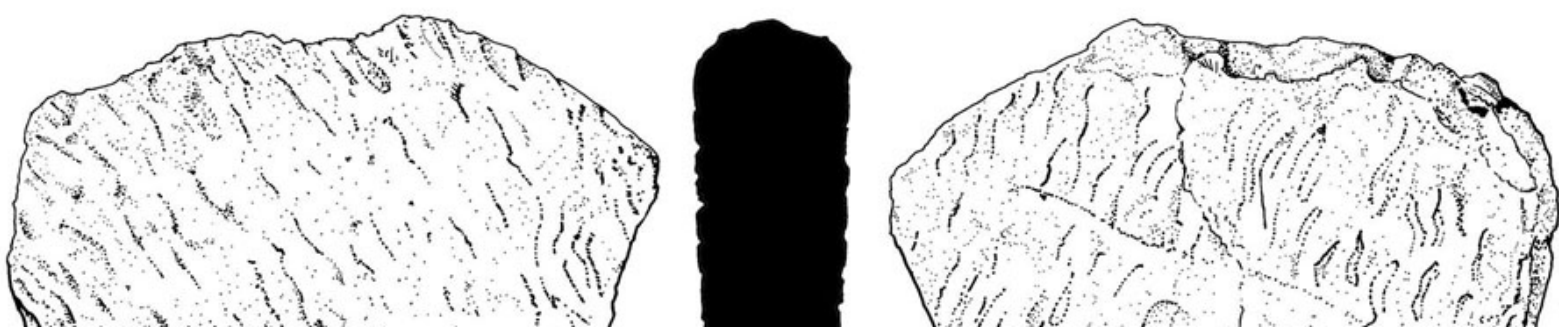
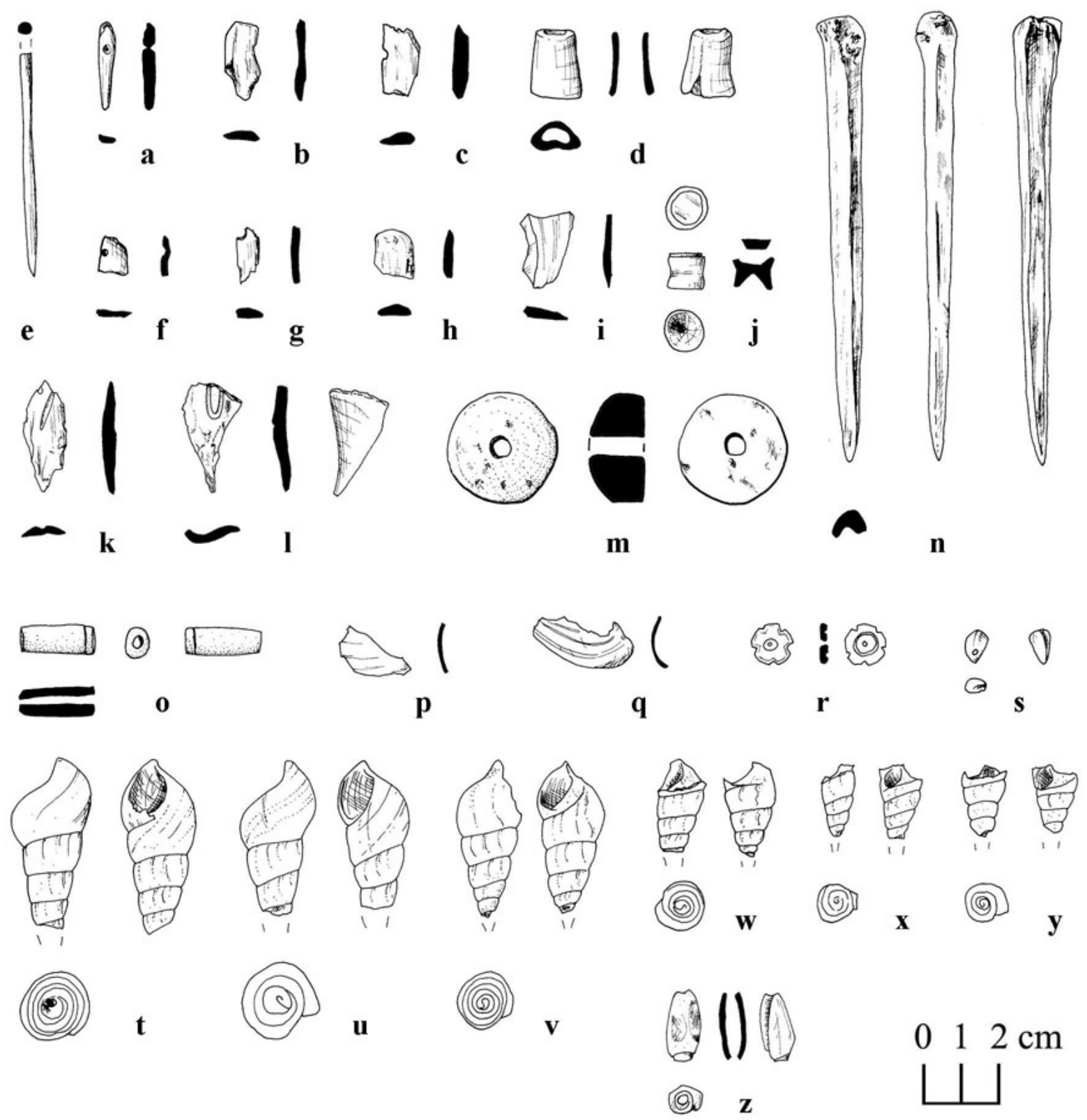
0 1 2 cm



**dd**



**ee**





**aa**





