Annual Report

of the

Cochuah Regional Archaeological Survey's

2014 Field Season

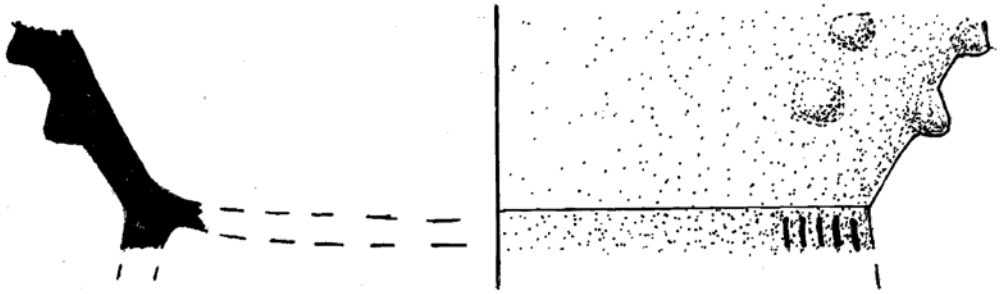

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Table of Contents

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Additionally, the members of Project would like to thank our family and friends, who have been very patient and supportive.

Finally, and most importantly, we would like to thank the people of Huay Max, Ichmul, Sacalaca, Saban, San Felipe, Tabasco, and Xquerol who have graciously allowed us to live and work in their *ejidos* during our summers. In addition to the crew members we were able to hire (following pages), we received countless archaeological (and survival) tips and assistance from individuals throughout the *ejidos*.

Part 1: Introduction to the 2014 CRAS Field Season

Chapter 1: Foci of the 2014 CRAS Field Season

Justine M. Shaw

Although the 2014 season of the Cochuah Regional Archaeological Survey (Figures 1 and 2) continued its long-standing program of test pits and mapping, the bulk of the season was devoted to the excavation of 4 round and 2 open-fronted structures. The 32 2x2-m test pits were concentrated at the sites of Yo'okop and Fortín de Yo'okop, with 1-3 units placed at other sites throughout the survey area. Mapping included the extension of the mapped area near Yo'okop's Group A in order to record an extension of Prehispanic monumental architecture along the ridge to the south of the *aguada*, as well as the refinement of the map of Gruta de Alux following greater exposure of architecture and recording of more of the extensive settlement of Yaxche.

Excavation of the round foundation braces was designed to better explore this feature class, believed to date to a time following the primary Terminal Classic occupation based upon the stratigraphic relationship between the round structures and diagnostically Terminal Classic architecture. It was hypothesized that the latter buildings might represent Postclassic residential occupations, which have thus far been largely absent in a region in which Postclassic ritual activities and features are relatively common. However, excavations did not reveal an occupational phase that could be chronologically distinguished from the Terminal Classic using ceramic evidence. The round features must belong to the end of the Terminal Classic, a post-monumental phase, or may indicate that domestic ceramics traditionally assigned to the Terminal Classic continued to be used into the Postclassic, with Chen Mul *incensarios* being the primary ceramic innovation, evidenced only in ritual contexts.

Functionally, the identity of the round structures is also unclear, indicating that we may be conflating multiple feature classes into our own cultural category that would not have been recognized by the ancient Maya. Some of the round structures are in locations well suited to residential functions, while others might have been better granaries, with good drainage; Parcela Escolar's N10W1-2, in fact, was built directly over sloping bedrock with its highest point in the center of the foundation brace.

The two open-fronted structures excavated at San Felipe (Structures N4E4-3 and N4E5-6) provided a wealth of information about the latter, post-monumental phase of the Terminal Classic. Positioned in the main plaza of the acropolis forming the site's northern group, they post-dated two long, stepped terraces that would have faced the *sacbe* to the southern group but pre-dated overlying residential and ceremonial architecture. Smaller open-fronted architecture in similar contexts had been investigated at the site of Nohcacab in 2005, but these earlier excavations were relatively artifact-poor in comparison. The greater quantity and diversity of the artifacts from the two structures at San Felipe included much richer lithic and ceramic samples, which indicated that traditional trade routes had broken down by this time, allowing materials that were rare or absent in earlier Terminal Classic contexts to enter the region. Their position and internal features also imply that the nature of

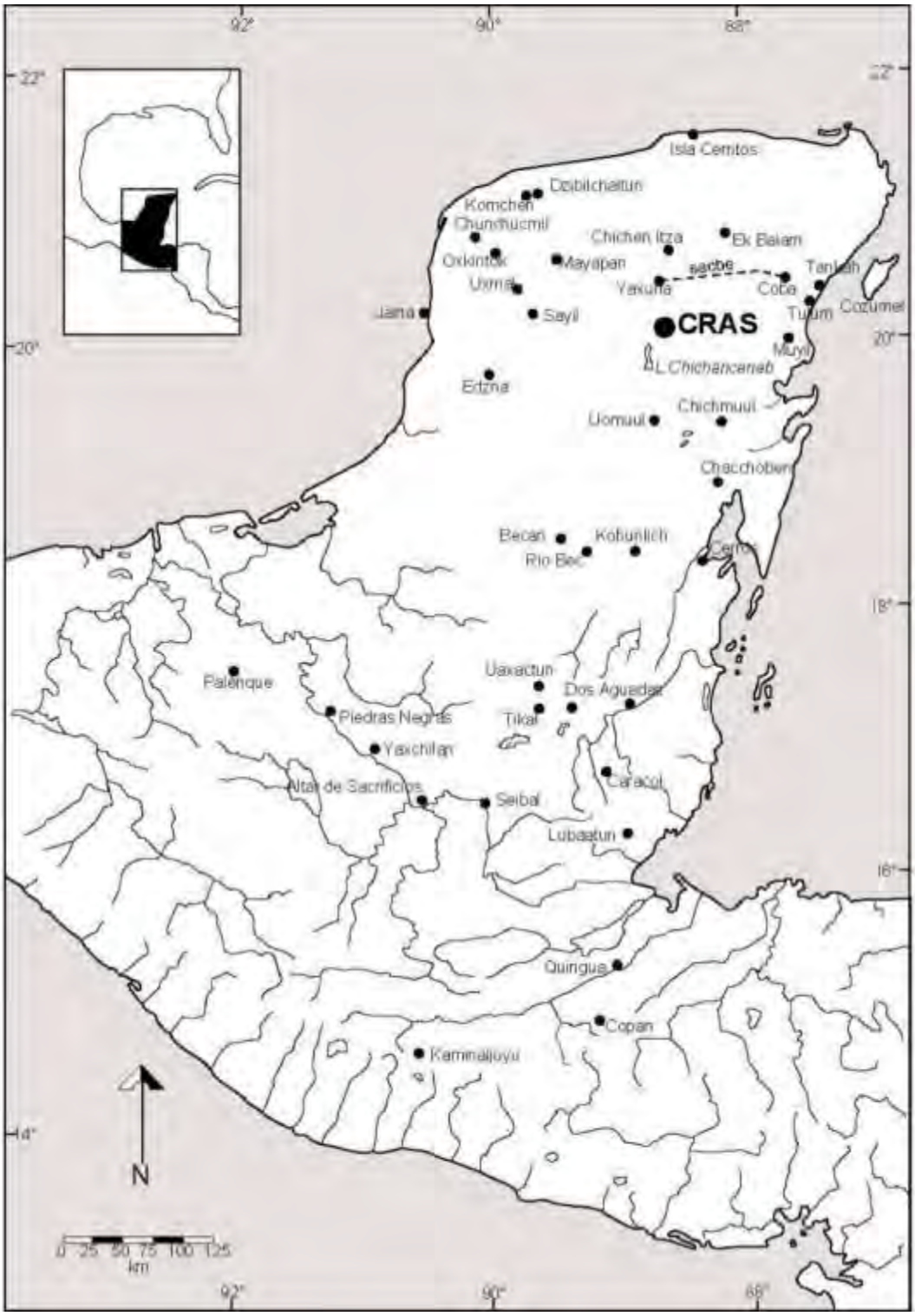


Figure 1. Location of the CRAS Study Area

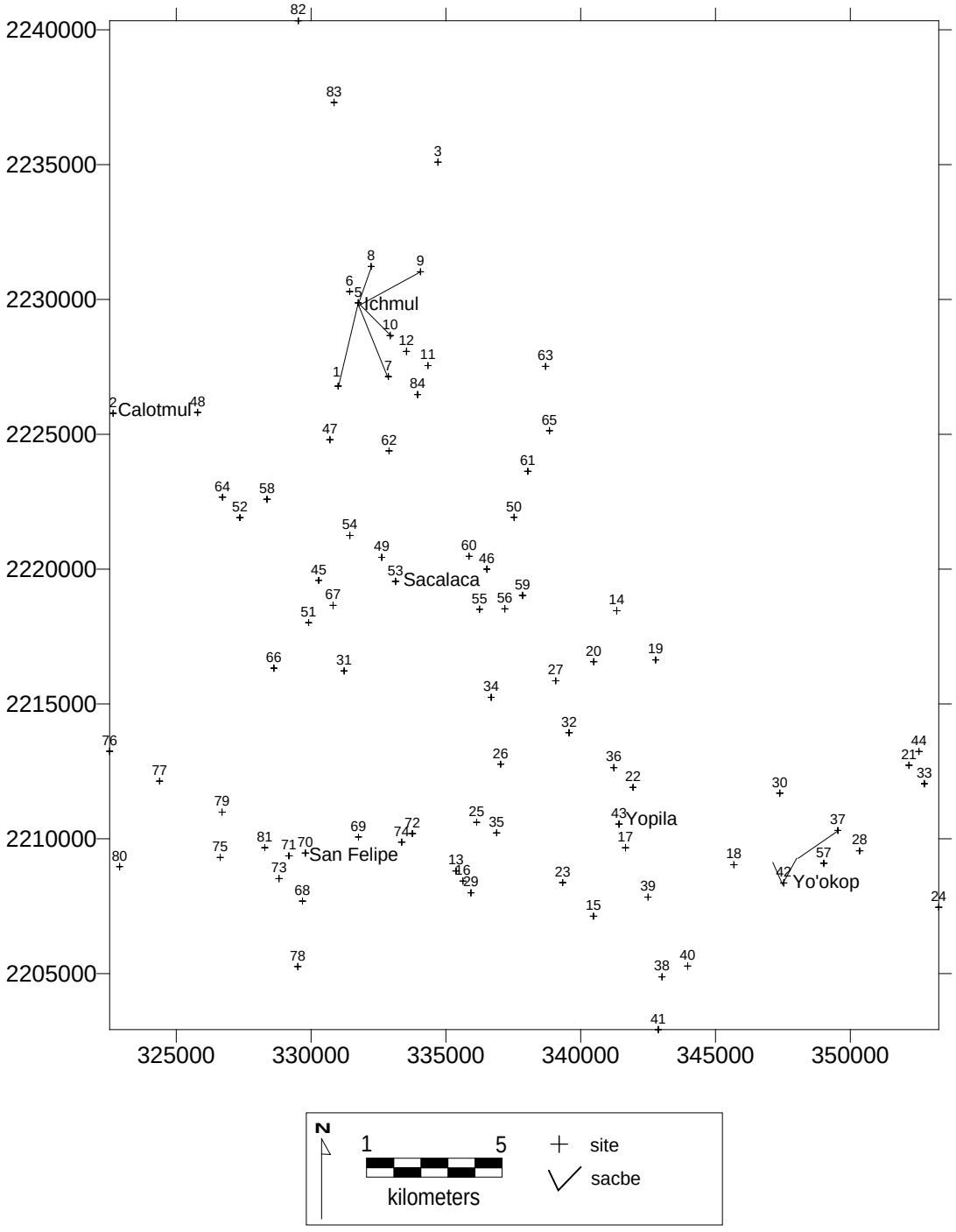


Figure 2. Sites within the CRAS Study Area
(Key on page 4)

Site	Name	Site	Name
1	Xquerol	43	Yo'pila
2	Calotmul	44	Ramonal
3	Chan Mahas	45	Aktun
4	Chikin Ichmul	46	Chakal Ja'as
5	Ichmul	47	Cortada
6	Poxil	48	La Esperanza
7	San Andres	49	Parcela Escolar
8	San Cristobal	50	Ramonal Oriente
9	San Juan	51	Ramonal Poniente
10	San Pedro Chan Ichmul	52	Rancho Guadalupe
11	X-ma-kabba	53	Sacalaca
12	Xbequil	54	San Andrés
13	Abuelos	55	Trincheras
14	Huay Max Aktun	56	San Diego
15	Balche	57	San Isidro
16	Chuun Katzin	58	San Juan
17	Chuun Pich	59	San Pablo
18	Fortín de Yo'okop	60	San Pedro
19	Gruta de Alux	61	Santa Cruz
20	Huay Max	62	Santa Elena
21	Kancep	63	Xbalcheil
22	La Trinchera	64	Xbaquil
23	Nenela	65	Xtojil
24	Palomar	66	Yo'aktun
25	Pancho Villa	67	Yo'dzonot
26	Rancho Rosales	68	Hopemul
27	Saban	69	Ramonal Quemado
28	Sahkabch'en	70	San Felipe
29	Sak Chikin	71	San Fernando
30	San Francisco	72	San Jose Sisal
31	San Isidro	73	San Lorenzo
32	San Manuel	74	Sisal
33	San Pedro	75	Candelaria
34	Santa Rita	76	Rancho Chankunai
35	Venadito	77	Rancho San Francisco
36	Xkanil	78	San Salvador
37	Xnicteil	79	Santa Elena
38	Yache 3 (x-Copó)	80	Tabasquito
39	Yaxche	81	Benito Juarez
40	Yaxche 2	82	Xlapak
41	Yaxche 4	83	Xnicteil
42	Yo'okop	84	Nohcacab

Figure 2. Sites within the CRAS Study Area (Key)

political rule had greatly changed by this time, being consistent with more shared or dispersed power in the hands of individuals who likely governed smaller territories.

The newly mapped area to the south of Yo'okop's *aguada*, as well as the emplacement of 10 test pits at the Fortín de Yo'okop revealed information about both the Classic Maya site of Yo'okop, as well as Caste War activities in the region. The zone south of the *aguada*, provisionally being called Puesto Militar Aguada*,* appears to be functionally and geographically analogous to the Fortín. It is placed along an extension of the same ridge overlooking the deeper agricultural soils in the core of Yo'okop. Like the upper part of the Fortín, it was terraced in Prehispanic times, with numerous monumental structures being built atop the artificial leveling. This pre-existing architecture was then recycled into Caste War fortifications which, like their predecessors apparently favored the view, defensibility, and possibly even the cooler breezes associated with this position. The Fortín test pits continued to flesh out the accounts provided in contemporary military publications and limited photographs. However, in some instances, the material from these excavations has also defied what was presented publicly, with later and less formal activities being evidenced.

Test pits from Yo'okop were concentrated in areas associated with the site's roadways in order to provide more samples to better date their construction and understand their functions. Of particular interest was the presence of steps along Sacbe 4 in order to provide easy access to the short feature; this contrasts with the causeway connecting Groups B and C, which may have been off-limits, at least for key events or for particular persons based upon its pedestrian underpass and lack of access steps.

Other test pits provided much-needed samples from sites and/ or groups for which minimal-to-no prior samples existed. These continue to reveal that the Late Formative and Terminal Classic were the two most populous periods for the region, with populations being concentrated only at the larger sites (Ichmul, Yo'okop, and to some degree Sacalaca/ Parcela Escolar) during the Early and Late Classic. An exception to this was the site of San Francisco, possibly because of its location in the southern portion of the survey area, relatively close to Yo'okop.

Towards the end of the field season, consultants from San Felipe led project members to a new site in their *ejido* that also contains a ballcourt, like those found at other sites in the southern portion of the survey area. This site, as well as others described to crew members this season, will be among those recorded in the future. In the long term, the project envisions 1-2 more seasons in its current area of focus, with an expansion of the survey area to the north or south planned after more data have been obtained from sites that have only been preliminarily sampled or recorded. Threats to archaeological features by the tremendously accelerated development of the region may also impact future investigation priorities.

Part 1: Introduction to the 2014 CRAS Field Season

Chapter 2: CRAS Research Methods

Justine M. Shaw

The 2014 Cochuah Regional Archaeological Survey (CRAS) involved archaeological research of the *ejidos* of Saban, Sacalaca, and San Felipe. The aim of the 2014 field season was to better define the late Terminal Classic to Postclassic transition, particularly through extensive excavations of circular and open-fronted structures. In addition, the project sought to obtain samples from more sites in the survey area in order to provide ceramics and other materials that might be used to investigate regional settlement dynamics through time.

Unlike prior seasons, very little mapping beyond that associated with excavations took place. At a limited number of locations, more detailed mapping had been done using a Topcon GTS-213 total station with a TDS-48 data collector operated by the principal investigators and/or other archaeologists. Topographic relief, as well as any *in situ* archaeological elements, was recorded. The resulting maps are presented with a 50-cm contour interval (unless otherwise noted) in order to display some subtle terrain changes. Crews from each *ejido* were hired to clear all features to be mapped and to help locate features. Due to the structure location procedure, mapping generally began near a large mound and proceeded to the surrounding territory as time permitted. Data on each point (recorded as coordinates N, E, and Z relative to the site datum, as well as with a descriptive code and notes) were saved on the data collector and then downloaded onto a laptop computer each night. Using Surfer (version 8.0), maps were generated daily to allow ground-truthing.

Numerous 2x2 m test pits were undertaken in the plaza(s) of several of the sites investigated this 2014 season. These plaza area excavations were aimed at providing ceramics from sealed contexts that could be used to date the sequence of constructions in a given area, as well as to determine the number and characteristics of such plaza flooring and occupation episodes. Test pits were excavated in natural levels and concluded at bedrock unless otherwise indicated, with materials separated according to the operation/ level/ lot system. All fill was removed using small hand picks and trowels, transferred to buckets, and then screened using 1 cm mesh. Shaw or Johnstone monitored each excavation, which was under the immediate direction of one or more of the Project's experienced archaeologists. One to four local crew members assisted with the excavation and screening. All test pits were backfilled upon completion of the excavating and recording process.

Structural excavations were divided into lots based upon the architecture in order to separate interior from exterior contexts, as well as to differentiate activity areas in both settings. Once exposed, all architectural elements were consolidated using a mix of white cement, *sascab*, and *cal* which was then painted a red tone using local *chac luum* sediment.

Artifacts from the excavations and surface collections were washed and marked with the site, operation, level, and lot. The Project utilized digital photography, plan and profile maps, and extensive note-taking to record remains visible on the surface and in

excavations. Sherds were identified to the variety level whenever possible, using the type-variety system (Smith et al. 1960).

Part 2: The *Ejido* of Saban

Chapter 3: An Introduction to the Fortín de Yo'okop

Alejandra Badillo

This season, eight 2x2 m test pits were excavated at this site. Four were inside the military fortification; one was west of the water well; one was at eastern part of the redoubt, and the other two were in the internal area of southwest and southeast bastions. In addition, one test pit was placed at the bottom of the slope, outside the fort and towards southeast, north of Structure N2W1-2 (Figure 3). Apart from the above-mentioned excavations, three other units were established at the top of the hill, where the other military construction that is part this military complex is located. This fortification, a "fortín," is smaller than the fortification that lies downhill. Three test pits were placed at the Fortín, one was outside the wall, on the eastern side of the access, and two were inside. The first of those was near Structure N1W1-1, while the other was to the north of Structure S1E1-1 (Figure 3).

Excavation of these units was carried out following natural and cultural levels; however, sometimes it was necessary to use arbitrary levels when natural strata were thick, in order to get maintain better vertical control. The particular method used in each excavation unit will be described in each chapter.

Overall the excavations at the site were planned to define the Prehispanic occupation of the site, in addition to understanding its relative chronology and the construction phases.

In addition, there is need for proper recording of everything that is in the site, because numerous artifacts composed of glass, metal, and other materials that apparently are out-of-context, which were part of the military campaign that was carried out at the last decade of the nineteenth century and early twentieth century, the last action of the Caste War in order to pacify the Maya rebels. That is why meticulous attention is needed to detect the stories of the various cultural processes that occurred at this site, from the founding of the Prehispanic occupation until the Caste War, in a span that covers 1,200 years, contained and mixed in 2 m below the surface.

It should be added that each excavation unit was backfilled with all the soil and rocks that were extracted, as will be described in the following chapters of each operation of the Fort of Yo'okop.

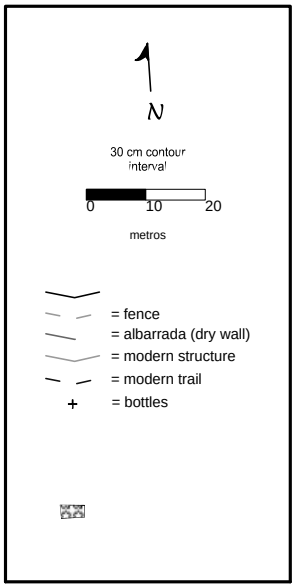


Figure 3. Fortín de Yo'okop, Location of 2014 Test Pits

Part 2: The *Ejido* of Saban

Chapter 4: Fortín de Yo'okop, Operation 6

Karleen Ronsairo

Operation 6 of the Fortín de Yo'okop was a 2x2m test pit located 18 m southwest of the water well of the main fort (Huerta Rodriguez 2012). Operation 6 was excavated by Jorge P. Huerta Rodriguez in the CRAS 2012 field season. In Operation 6, Level 2, Lot 2, a concentration of seven overlapping pots associated with a historic wall was extracted from the test pit (Huerta Rodriguez 2012:82). These seven overlapping pots were plastered with cloth and wire for protection and placed in a wheelbarrow after extraction (Figure 4).

The wheelbarrow excavation of the seven overlapping pots involved removing the plaster, cloth, and wire that were protecting the pots. The pot sherds were recovered by excavating the wheelbarrow in seven levels and screening the loose soil that surrounded the seven pots in order to recover loose pot sherds that were not associated with a level. Each layer of pot sherds were drawn and photographed, then placed in corresponding bags (Figures 5-18). Any loose pot sherds not associated with a layer were placed in separate bags. These bags of pot sherds were placed in a bin to be sent to INAH for further investigation.

Figure 4. Fortín de Yo'okop, Operation 6, Level 2, Lot 2 Prior to Excavation

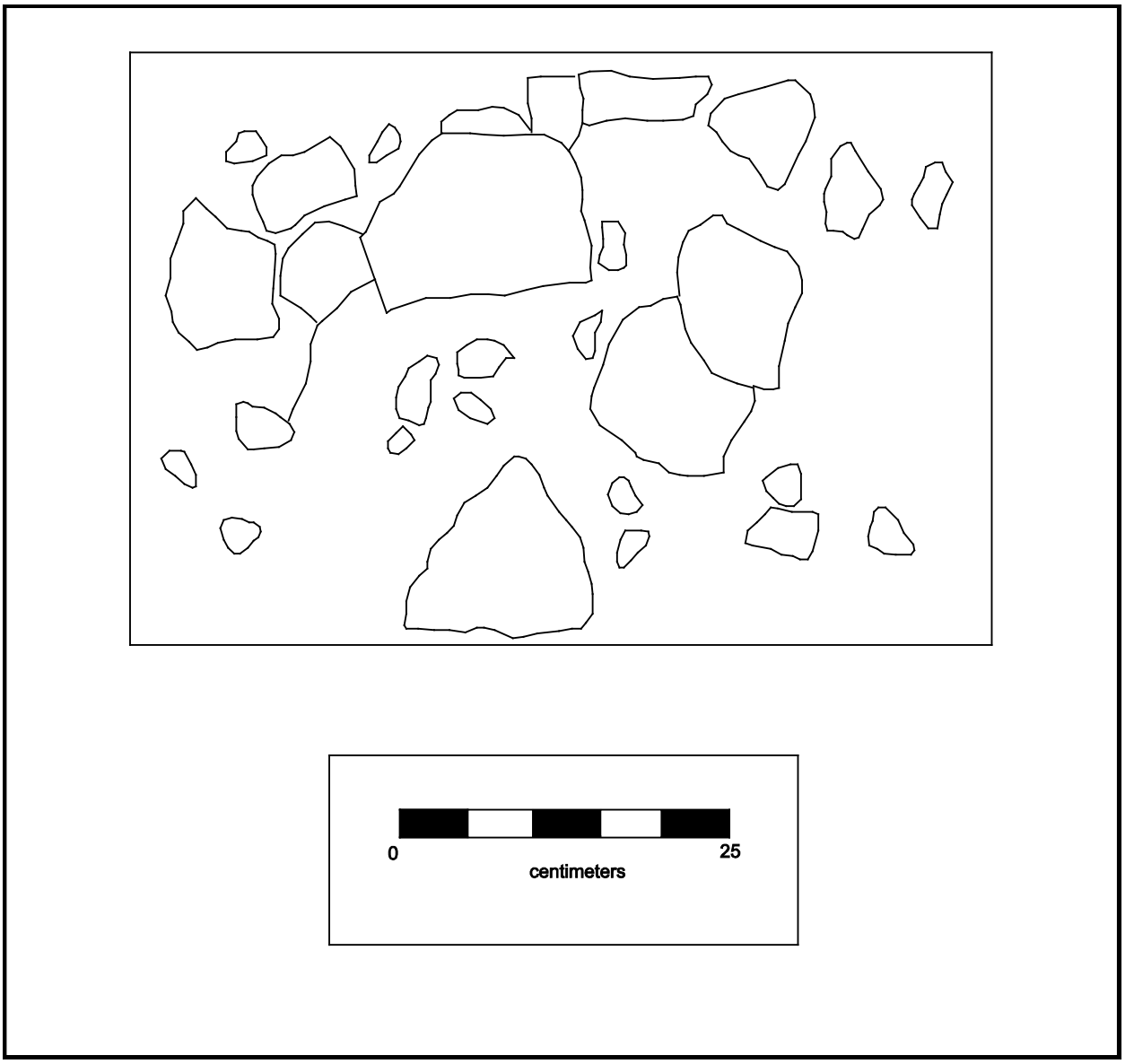


Figure 5. Fortín de Yo'okop, Operation 6, Level 2, Lot 2, Bag 2, Plan Map

Figure 6. Fortín de Yo’okop, Operation 6, Level 2, Lot 2, Bag 2

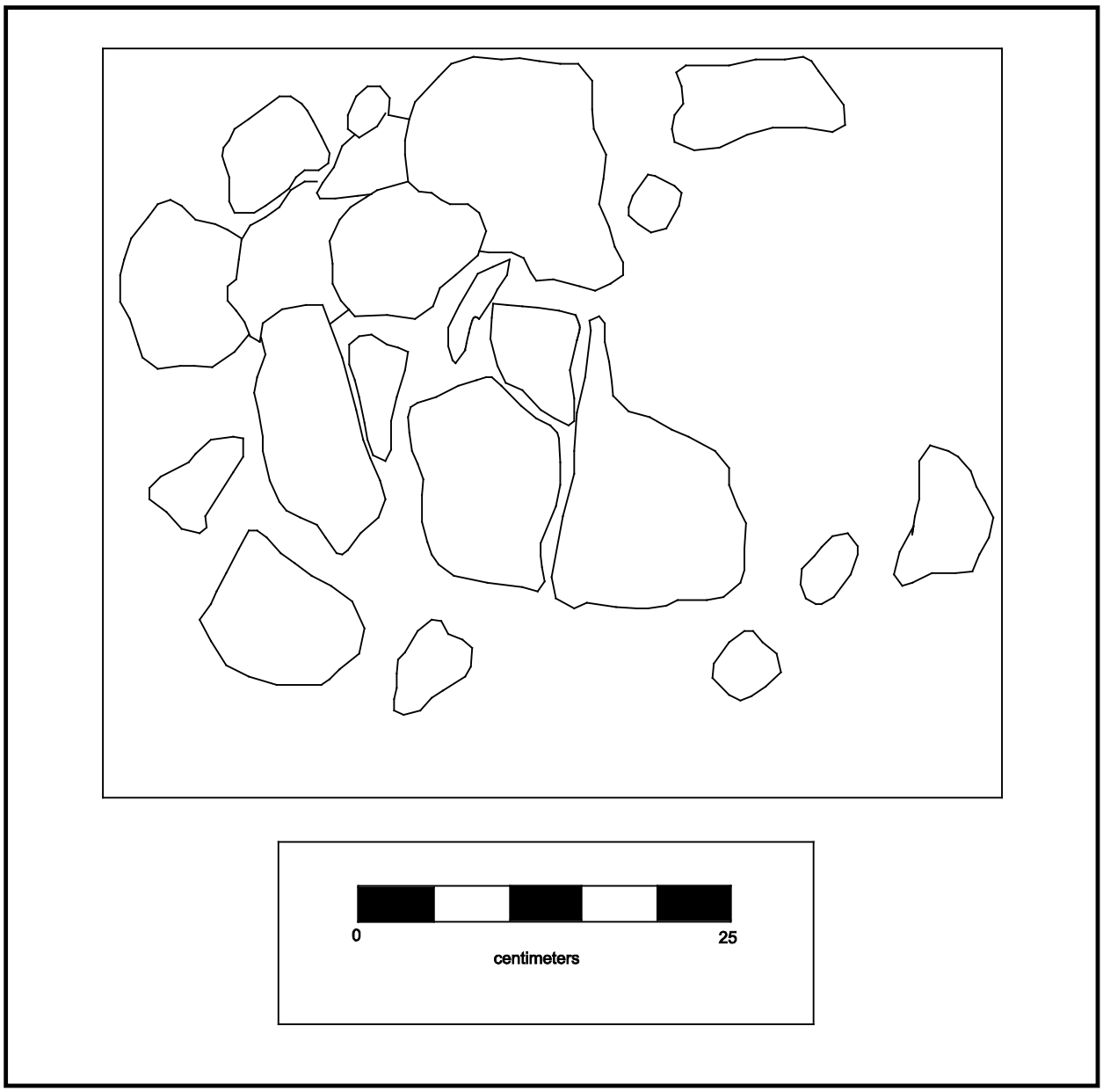


Figure 7. Fortín de Yo'okop, Operation 6, Level 2, Lot 2, Bag 3, Plan Map

Figure 8. Fortín de Yo’okop, Operation 6, Level 2, Lot 2, Bag 3

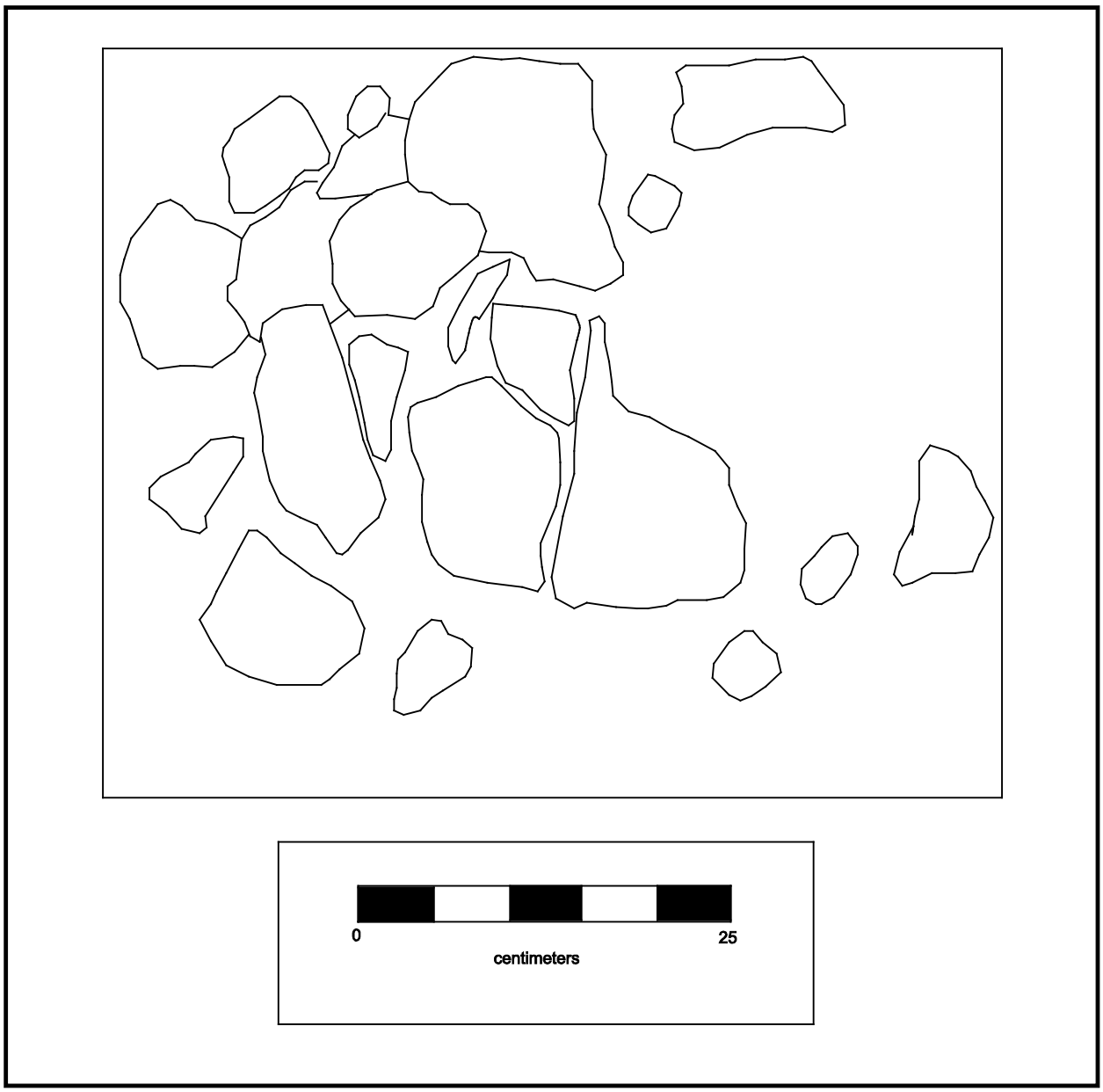


Figure 9. Fortín de Yo'okop, Operation 6, Level 2, Lot 2, Bag 4, Plan Map

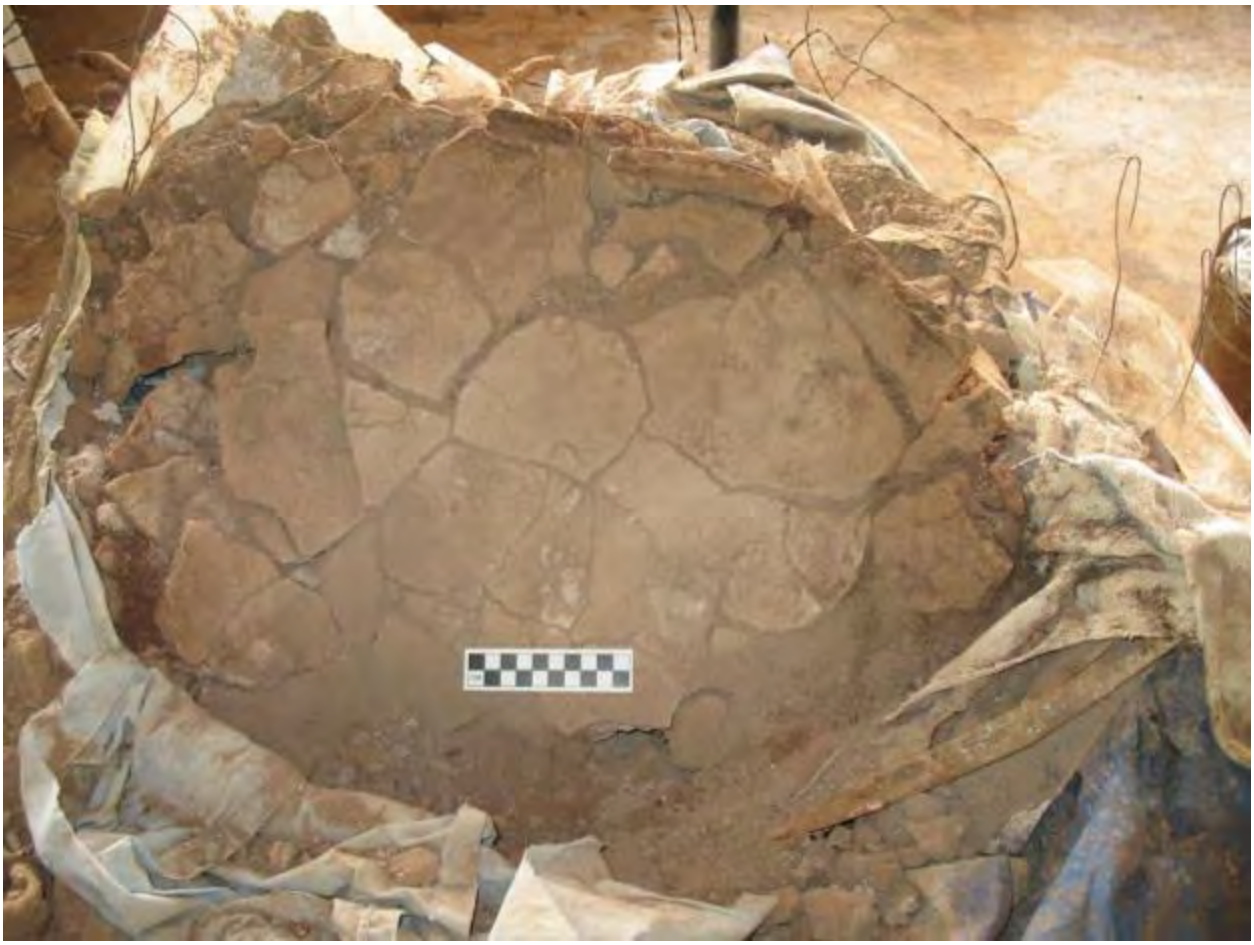


Figure 10. Fortín de Yo’okop, Operation 6, Level 2, Lot 2, Bag 4

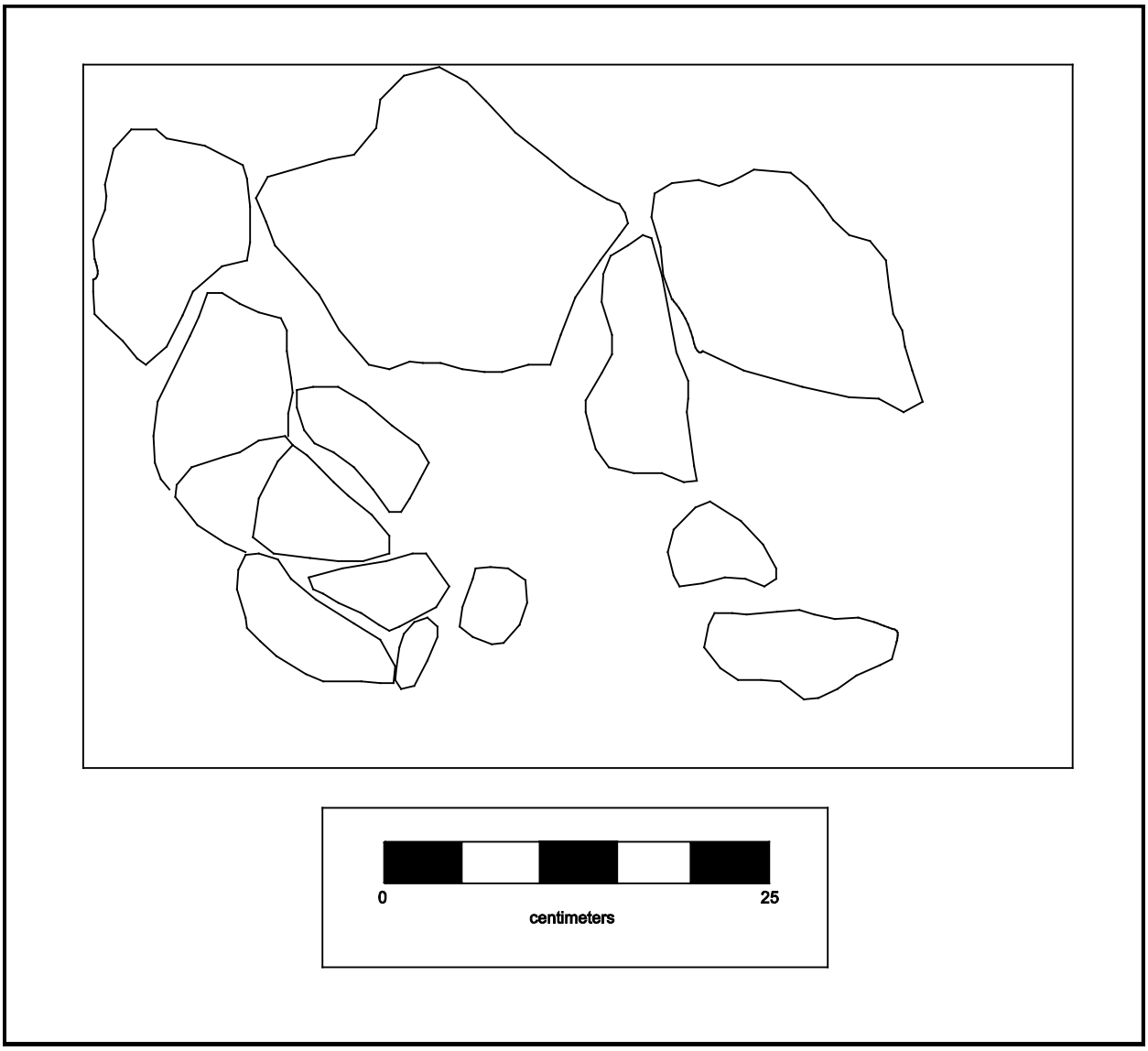


Figure 11. Fortín de Yo'okop, Operation 6, Level 2, Lot 2, Bag 5, Plan Map

Figure 12. Fortín de Yo’okop, Operation 6, Level 2, Lot 2, Bag 5

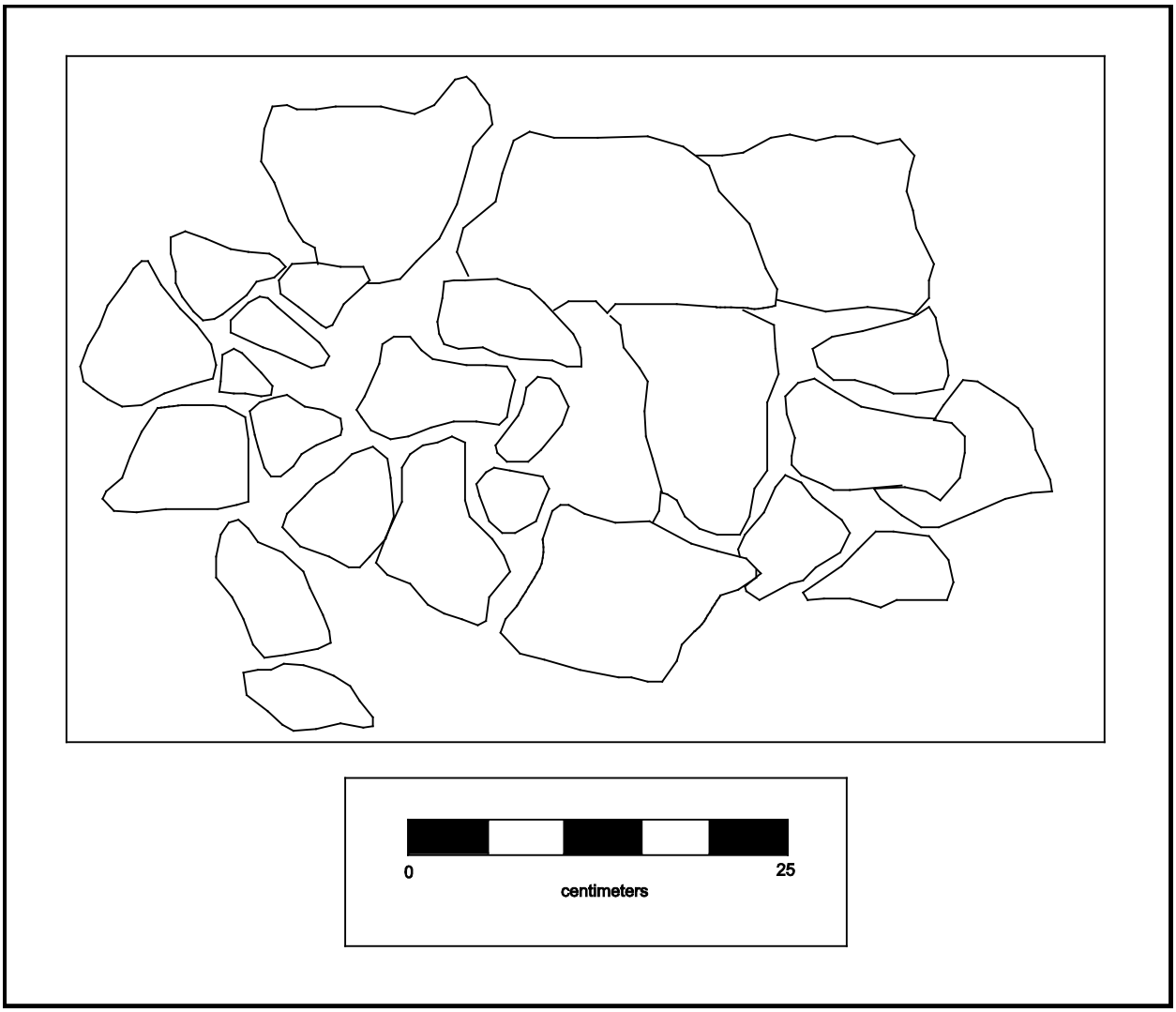


Figure 13. Fortín de Yo'okop, Operation 6, Level 2, Lot 2, Bag 6, Plan Map

Figure 14. Fortín de Yo’okop, Operation 6, Level 2, Lot 2, Bag 6

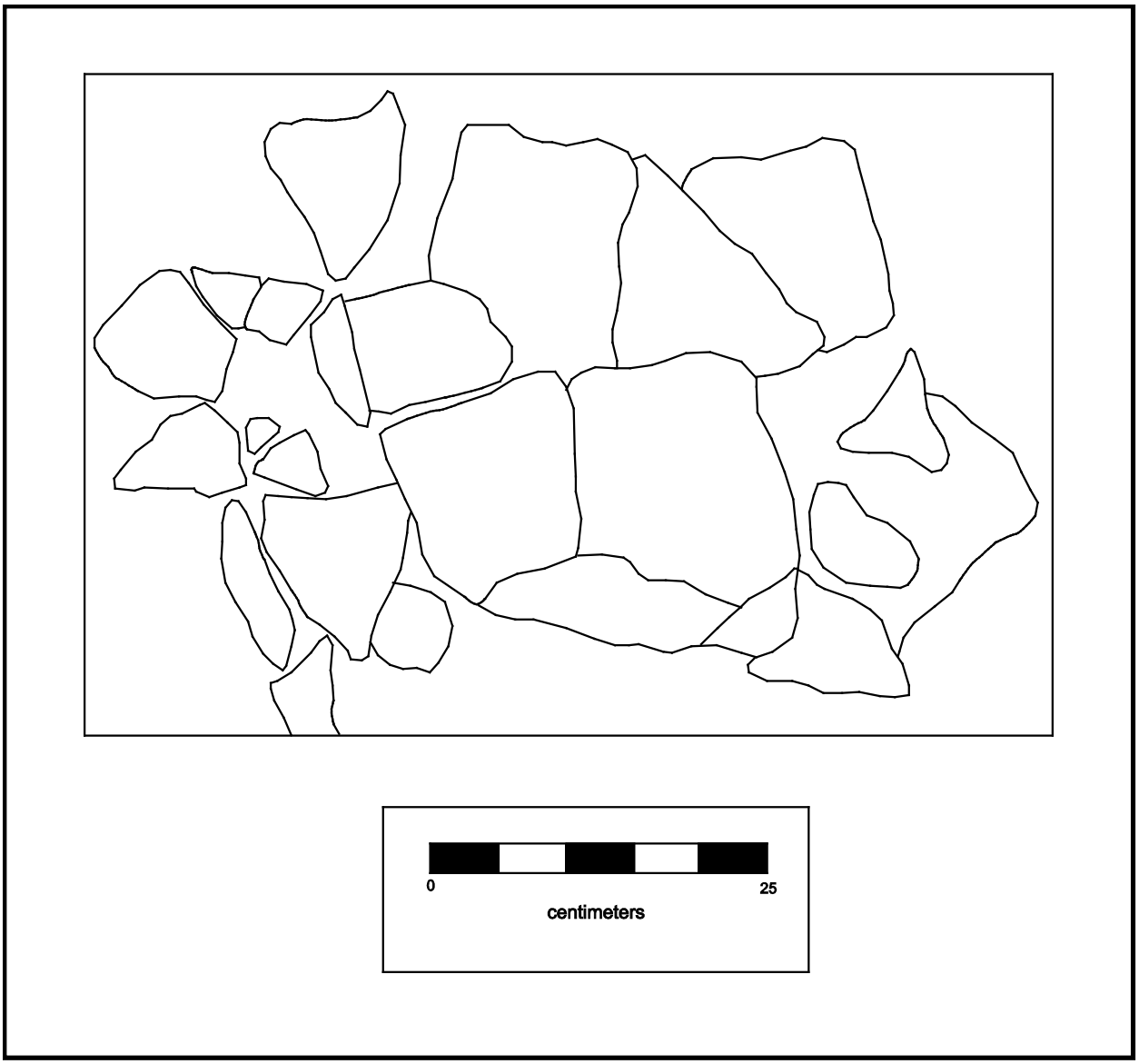


Figure 15. Fortín de Yo'okop, Operation 6, Level 2, Lot 2, Bag 7, Plan Map

Figure 16. Fortín de Yo’okop, Operation 6, Level 2, Lot 2, Bag 7

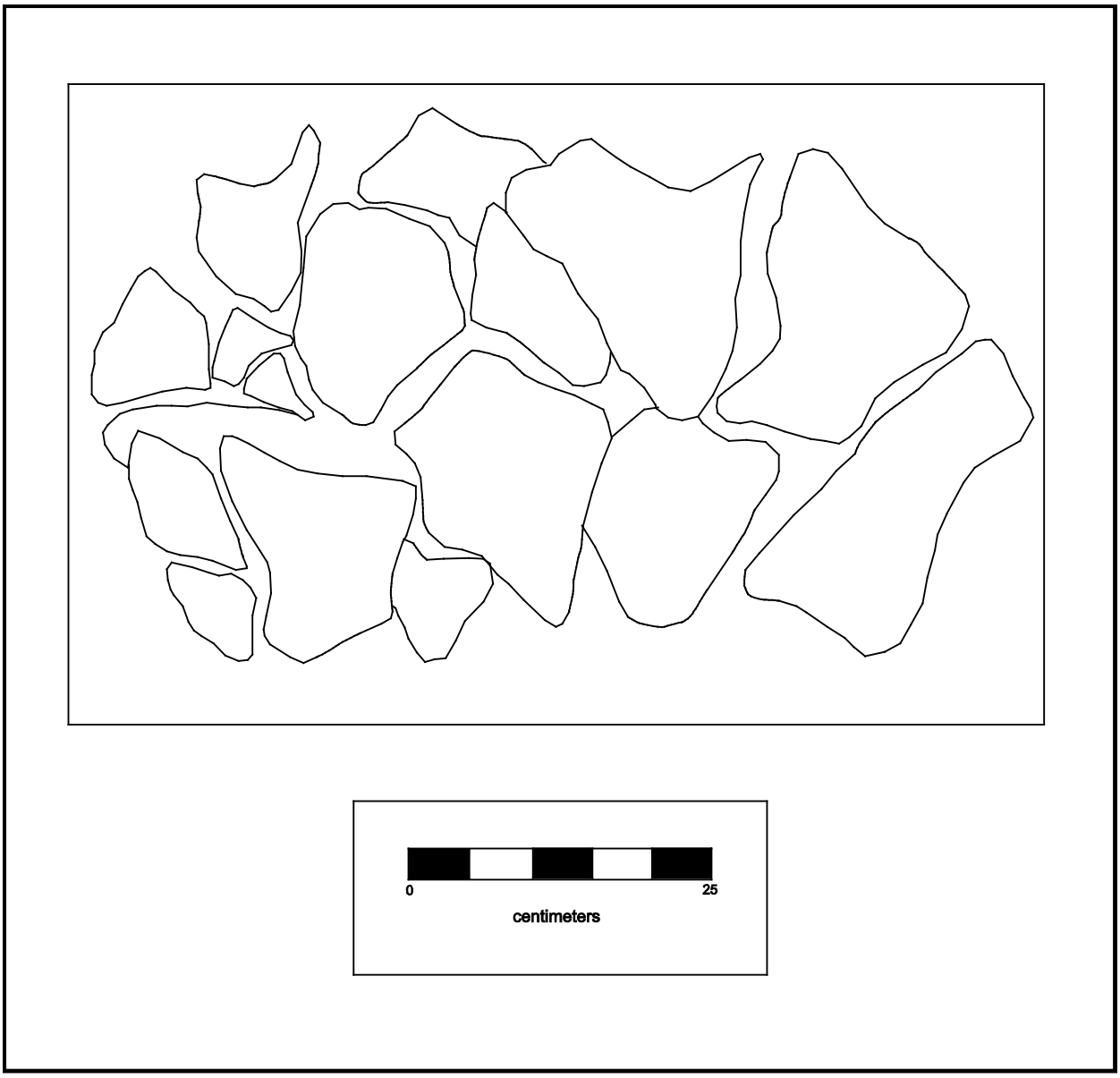


Figure 17. Fortín de Yo'okop, Operation 6, Level 2, Lot 2, Bag 8, Plan Map

Figure 18. Fortín de Yo’okop, Operation 6, Level 2, Lot 2, Bag 8

Part 2: The *Ejido* of Saban

Chapter 6: Fortín de Yo'okop, Operation 8

Alejandra Badillo

This unit was located inside the Fortín of Yo'okop. This operation was planned with the aim to define the construction of the nineteenth century fortification system, as well as to explore the activities that were conducted in the area since Prehispanic periods. Close to this excavation a large anthill was located, and it extended across the east side of the citadel. This anthill caused a large disturbance in the area due the removal of large quantities of soil.

For that reason, the excavation of this unit was located at 7.42 m east of the redoubt, in order to avoid the area occupied by ants (Figure 3). The excavation began removing the litter layer and organic matter from the surface, which revealed regular topography (Figure 19). Level 1, Lot 1 began with the removal of a silt-clay sediment texture, low compaction, dusky red in color (10YR 3/2), and a shallow depth of 3-6 cm thick. This stratum also contained abundant fine roots. In the northern corner, a clayey sediment with low compaction was observed, and was named as Level 1, Lot 2. This layer had a dark reddish brown color (2.5YR 3/4), with fine roots and irregular stones that belong to an architectural feature that was found in the next level. This sediment was excavated until 20 cm in depth below the surface level.

Below the previous level, Level 2, Lot 1 was found. This was a cultural layer consisting of a row of irregular rocks of 6-25 cm in length, adapted to form a sort of pavement, with an orientation of 60° N. This deposit has a clayey silty matrix of soil, with a dusky red color (10YR 3/2) (Figure 20). The cultural feature was observed throughout the excavation unit, therefore the exact dimensions are unknown (Figure 21). It is noteworthy that this architectural element was not altered by the excavation work, and was left *in situ* in order to preserve its condition and stability. For that reason, excavation of this unit only continued in the southern sector.

The above-mentioned architectural feature is located to the southwest of Level 2, Lot 2, a 25-to-27 cm thick sediment, clayey, with a medium compaction and dusky red color (10YR 3/4). This layer also contained fine roots and rootlets, as well as several 7-to-20 cm irregular stones, which are mainly located in the southwestern corner of the unit. In addition, several small reddish concretions, mixed with the soil, were also observed.

In this area, a change in the color of the soil to a dark reddish brown (5 YR 2.5/2) tone was documented. This level was named as Level 2, Lot 3, and was a clay-silty sediment, with low compaction and abundant fine rootlets and a large burned root. This root was found at 79 cm in depth, and apparently belongs to the remains of a tree that was burned in past years, located a few meters north of the unit. This root was 15-to-16 cm thick (Figure 22). Within this layer a different color was detected. This was focused in the southeast part of Level 2, Lot 4, and corresponds to an dark reddish brown soil (5 YR 2.5/2), with red spots (2.5YR 4/6), and low compaction, fine roots and a burned stone (Figure 23).

The last layer was Level 3, Lot 1, which was a silty clay sediment with high

compaction. This sediment had different shades, ranging from dark reddish brown (2.5 YR 3/3, 3/4) to red (2.5 YR 4/6), with several spots of dark gray ash (5 YR 4/1), presumably the

Figure 19. Fortín de Yo’okop, Operation 8, Surface

Figure 20. Fortín de Yo’okop, Operation 8, Level 2, Lot 1

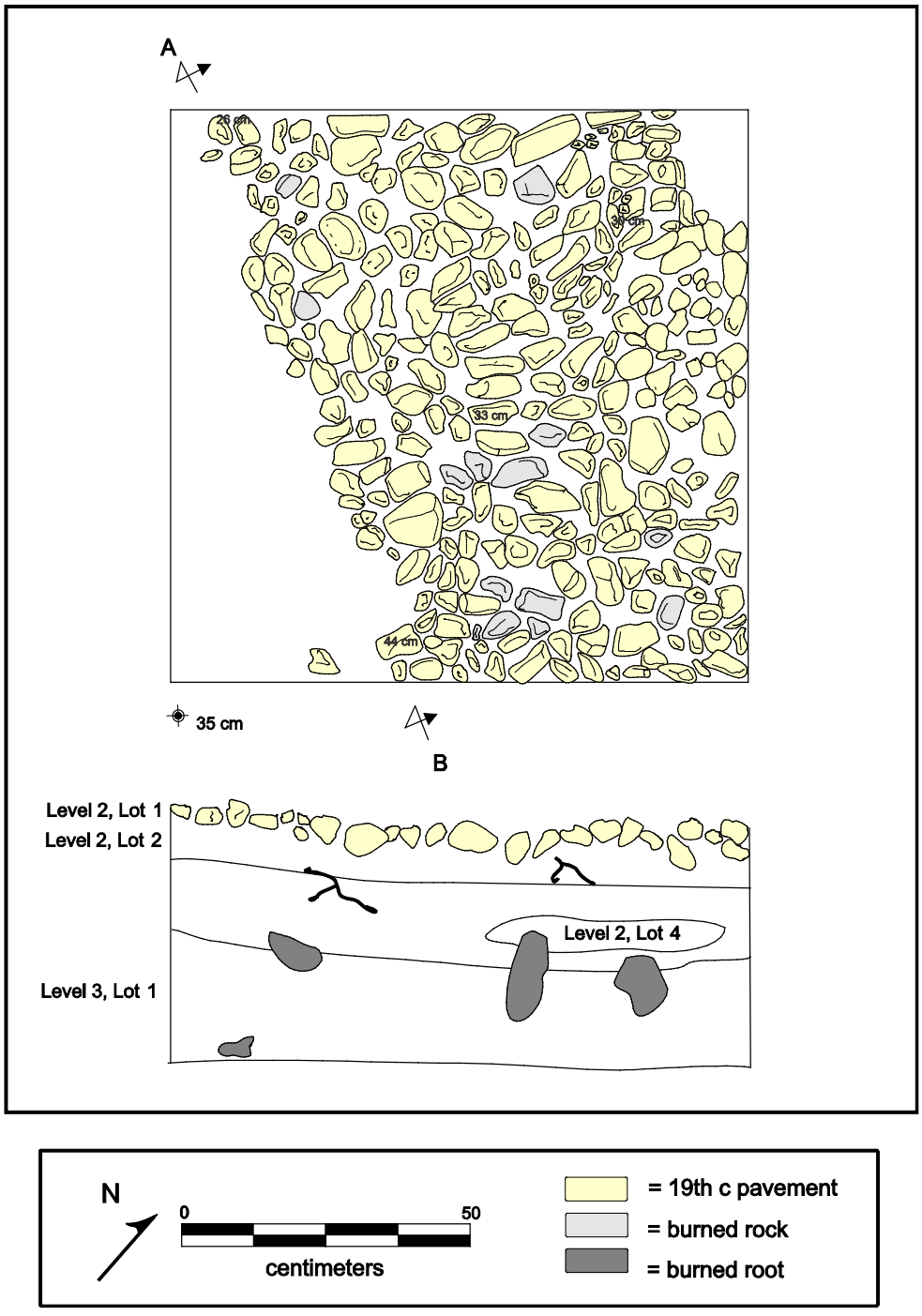


Figure 21. Fortín de Yo'okop, Operation 8, Plan and Profile of Walkway

Figure 22. Fortín de Yo’okop, Operation 8, Level 2, Lot 3

Figure 23. Fortín de Yo’okop, Operation 8, Level 2, Lot 4

result of roots burned (Figure 24). Within this level, a few light blue glass bottle fragments were found, at 54 cm depth from the surface. However, due to the small number of archaeological and historical material as well as the reduction of the excavated area, this unit was concluded at 78 cm depth (Figure 25). After the excavation and proper registration, the test pit was backfilled, re-integrating all the sediment extracted and carefully covering the architectural feature (Figures 26 and 27).

Interpretation

Information obtained in this unit confirmed the existence of a main walkway that leads to the redoubt area, the primary position of surveillance that guarded the main entrance on the west side of the fort. This architectural feature possibly spread eastward along the fortification, reaching east access.

As shown in a photograph of early twentieth century, in the last decade of the nineteenth century, when the fort was in use, in the central part there was a large hall with thatched roof that ran along the central area (Badillo 2010). Perhaps under this temporary structure the walkway feature was originally located; the stones seem to have functioned as a floor or paved thoroughfare that connected the main areas. Therefore, it is very likely that evidence of post-holes that sustained the hall could be located in the future.

The architecture style of the walkways of this fortification is very particular, as seen in the Operations 4, 12, and 15 (see Chapters 9 and 12), since they were made through the reuse of Prehispanic stones from a previous settlement that lies below the twentieth century occupation. The builders of the fort employed irregular medium-size stones that seem to have been part of a Prehispanic artificial leveling, such as the walkway located at this unit, in which the stone was placed in a way that seems to follow a central axis, defined by the arrangement of some stones in the center, while the other rocks were arranged horizontally and along its length (Shaw 2012:66 and see Chapter 9). However, to corroborate the dimensions of the walkway or the extension of the pavement, as well as to determine its function, it is necessary to conduct other excavations at the opposite side of the redoubt.

Several rocks that form the walkway are burned. This evidence might correspond to a contemporary event to the construction of the fort. Stratigraphy suggests that the area was burned before the construction of the fortification for cleaning of vegetation. Once the zone was clean, the stones were selected and used in the construction of the walkway. Another possibility is that the stones were burned during previous events to the construction of the fortification, perhaps due to farming activities carried out in the Prehispanic times of Yo'okop.

Regarding the Prehispanic occupation, a few sherds were collected. Samples of Yokat Striated: Variety Yokat, from Terminal Classic, were recovered from Level 1, Lot 1, while a few fragments of Dzudzuquil Cream to Buff and Tumben Incised, both from Late Formative, were excavated at Level 3, Lot 1. However, to get a better understanding of the early occupation in this area it would be necessary conduct more excavations.

Figure 24. Fortín de Yo’okop, Operation 8, Level 3, Lot 1

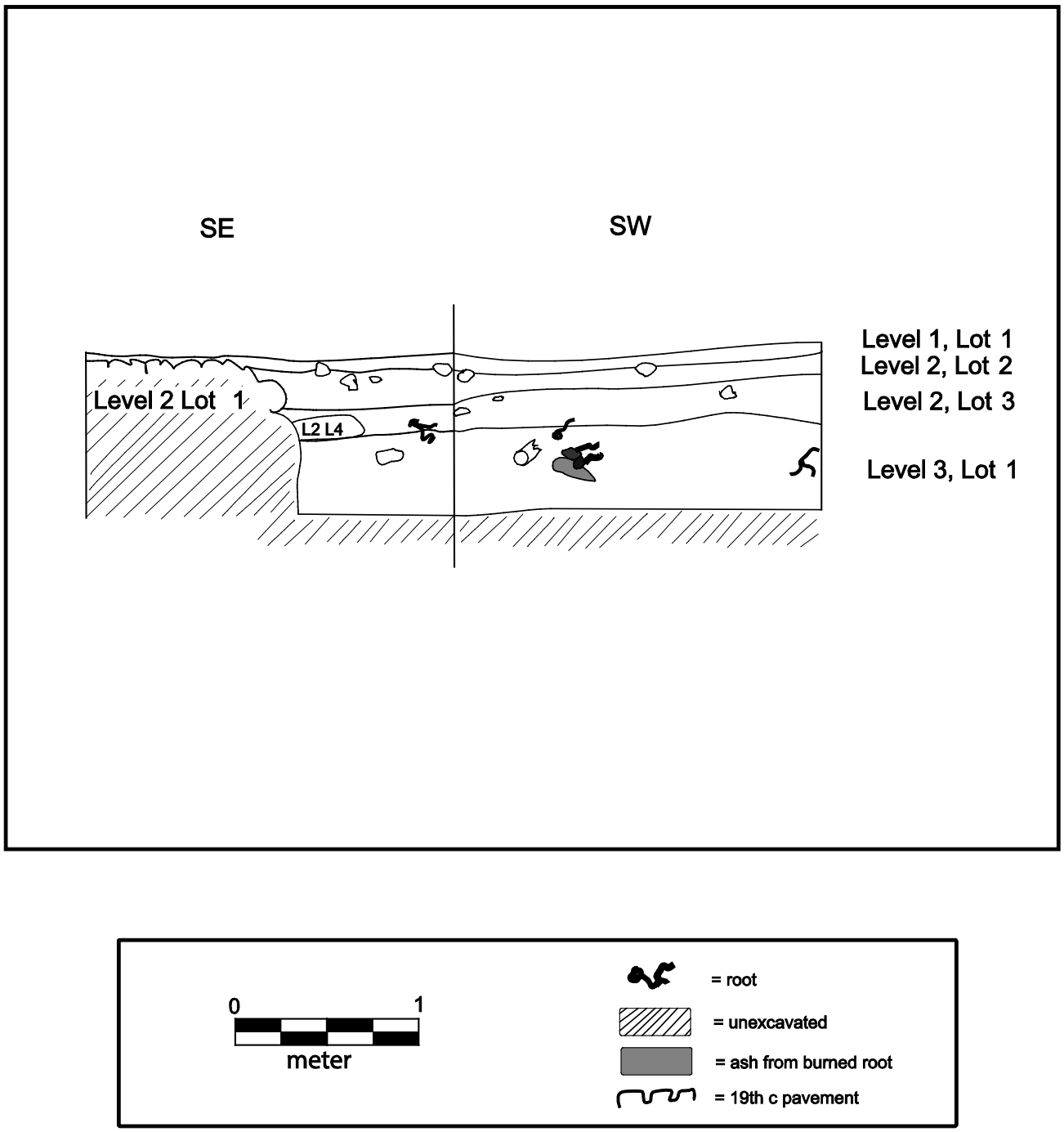


Figure 25. Fortín de Yo'okop, Operation 8, SE and SW Profiles

Figure 26. Fortín de Yo'okop, Operation 8, Backfilling Process

Figure 27. Fortín de Yo'okop, Operation 8, Backfilled

Part 2: The *Ejido* of Saban

Chapter 6: Fortín de Yo'okop, Operation 9

Michael Bradford

Operation 9, a 2 x 2 m test pit, was placed in the northwest quadrant of the Fortín de Yo'okop. The test pit was located on a relatively flat area within the fort, just south of the northern wall and north of a modern stone wall and fence-line. There were no visible rocks or architectural features on the surface that would be affected by the excavation. Methodology of Operation 9 consisted of a combination of strategies, including excavation according to arbitrary metric and natural stratigraphic levels. Excavation was conducted by trowel and hand-pick. All excavated soil was screened through 1-cm mesh. Artifacts were bagged separately according to level, lot, and artifact type. All soil was replaced upon termination of the test pit. The main research goal of Operation 9 was to test for historic cultural material associated with Fortín in order to gain a better understanding of its role in the Caste War and the activities that took place during its occupation by Federal troops in the final decade of the 19th and beginning of the 20th centuries. A secondary objective of the excavation was to provide a better understanding of the Prehispanic component of the site and to what degree it may have been disturbed by the historic construction and occupation of the fort.

The location of Operation 9 was cleared of organic material before the 2 x 2 m test pit was set up. It was noted that the area appeared to have at least some degree of both historic and modern disturbance. The landform was relatively flat and had most likely been leveled and modified during activities associated with the construction and occupation of the fort. Some soil may have been used in the construction of the fort wall to the north. Further disturbance of the area consisting of soil relocation and deposition may have occurred during the excavation of a defensive trench along the outer side of the north wall. Modern disturbance appears to have taken place as the result of *milpa* farming and use of the area as a livestock pasture.

Operation 9, Level 1, Lot 1 was excavated as an arbitrary metric level of an average of 10 cm in depth, although there was some slight variation in ground surface level. Soil consisted of 7.5YR 2.5/2 very dark brown silty clay of friable compaction. The level contained some patches of darker 10YR 2/1 black and 10YR 3/1 very dark gray soil with charcoal flecking, most likely due to recent burning associated with *milpa* farming activities. Burned roots and larger pieces of charcoal were also present. The level had moderate root disturbance. Artifacts recovered from Lot 1 consisted of one piece of clear glass and one light green glass wine bottle fragment. Metal believed to be associated with the occupation of the fort included two metal wire fragments, two rectangular metal can rim fragments, and several metal can body fragments. Six unidentified ceramic sherds were also recovered from the level. The level was terminated at an average depth of 10 cm below ground surface (cmbgs). Although some mixing with Prehispanic ceramics is present due to disturbance, based upon the historics that were recovered, Level 1, Lot 1 is considered to be associated with the historic Federal occupation of the fort.

Excavation methodology strategy of Level 1, Lot 2 was changed to that of a natural stratigraphic level. The level was excavated until a transition in the natural soil horizon was encountered. The average thickness of the level was 10 cm, which was at an average depth of 20 cmbgs. Soil continued to consist of 7.5YR 2.5/2 very dark brown silty clay of friable compaction. The level contained moderate root disturbance. Several root burns were

present. Charcoal and small amounts of burned rock were observed but not collected. A concentration of stone was present in the southwest corner of the test pit at the base of level. The stone concentration had a top depth of 14 cmbgs (Figure 28).

A variety of artifacts were recovered from Level 1, Lot 2. The level is considered to be associated with the historic occupation of the fort. Artifacts associated with earlier components are believed to be present due to disturbances at the site. Prehispanic artifacts recovered from the level included 19 ceramic sherds and one piece of lithic debitage. One ceramic was identified as a Ticul Thin Slate sherd dating to the Terminal Classic Period. One chert distal flake fragment was recovered near the base of the level. The chert fragment is 10YR 8/1 white in color and has maximum metrics of 23 mm in width, 18 mm in length, and 4 mm in thickness. Historic material included one olive green glass bottle fragment. A faunal fragment, possibly deer, was recovered from the level and may be associated with the historic component of the site.

Other historic artifacts recovered from Level 1, Lot 2 included four metal items that appear to be associated with the military occupation of the fort. Two of these are what are known as “stripper” or “charger” clips that would have each held five cartridges for faster loading in Mauser bolt-action rifles. Both were too corroded to observe any maker’s marks that may have been present near the center of the outside back of the clips. One complete unfired cartridge, which also had not misfired, was recovered from the level. The cartridge has a headstamp bearing the mark “FN,” which identifies it as having been produced by the *Fabrique Nationale d'Armes de Guerre* company in Herstal, Belgium. The company was originally established in 1889 for the manufacture of Mauser rifles, and it soon became a leading producer for firearms and ammunition. The company later changed its name to *Fabrique Nationale d'Herstal*, and is commonly referred to as FN Herstal. This complete cartridge has a pre-1905, 1888-pattern German round-nose cylindrical cupronickel bullet. Production of this pattern of bullet was later discontinued in favor of the pointed and tapered *S Patrone* 1905-pattern Spitzer bullet shape. This appears to be a 7 mm cartridge for an 1893 or 1902 model Mauser 7x57 rifle, which were used by Mexican Federal troops. FN Herstal had been exporting 7 mm Mauser 7x57 ammunition to Latin American since 1893. The other metal item recovered from the level is a fired cartridge casing with a “WRA Co 30 WCF” headstamp, which identifies it as a .30 caliber Winchester Center-Fire cartridge manufactured by the Winchester

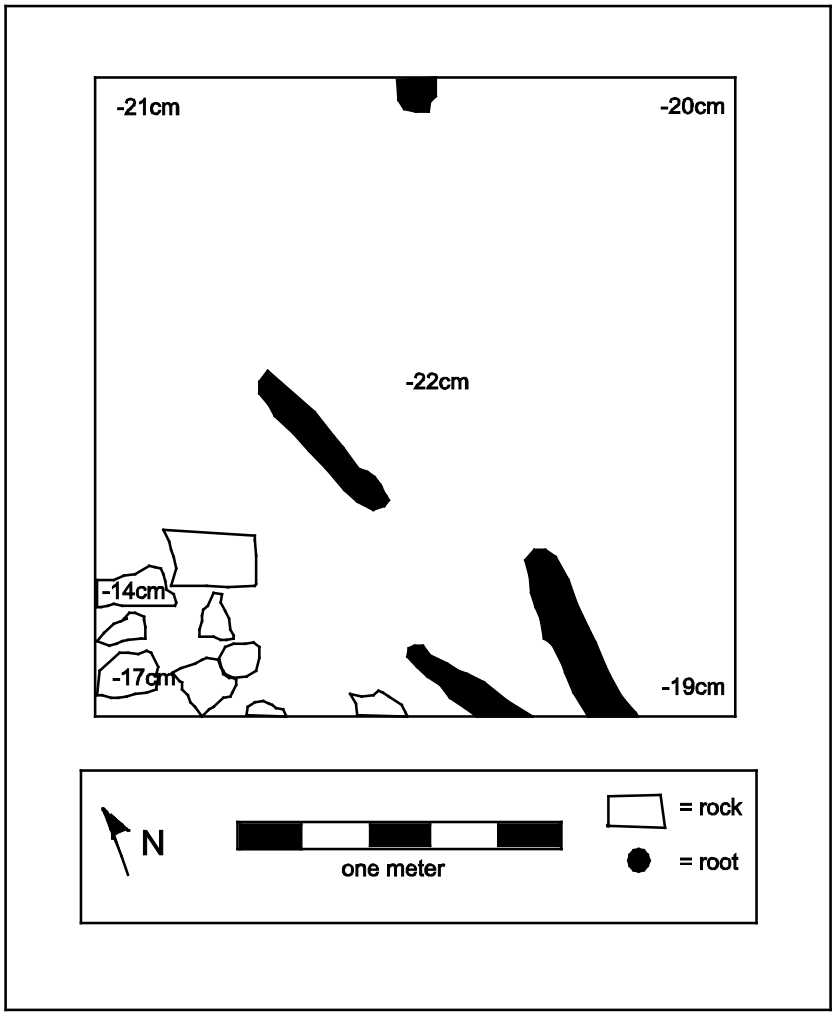


Figure 28. Fortín de Yo'okop, Operation 9, Level 1, Lot 2, Plan Map

Repeating Arms Company. This cartridge was first produced in the United States in early 1895 for use in the .30-30 Winchester Model 1894 lever-action rifle that became known as the *"treinta-treinta"* in Mexico and elsewhere in Latin America. Winchester arms and ammunition were sometimes used during the later part of the Caste War by the Maya revolutionaries. These likely would have been obtained through Belize, which was the only trading partner of the Maya at the time.

There are several possible explanations for the presence of the Winchester cartridge at the Fortín. The cartridge may have been fired by a Maya revolutionary during one of several battles known to have taken place at the fort. It may have been fired by Federal troops who had taken a Winchester rifle from the Maya. It could have been from a Maya who had joined the Federal troops. It seems likely that the cartridge is contemporaneous with the military occupation of the Fortín; however, the possibility also exists that it had been deposited slightly before its construction in 1899 or after the fort had been abandoned. It is hoped that further investigations in the next several years will provide more data that will add to the understanding of the military occupation of the Fortín de Yo'okop and the role it played in the later years of the Mexican Caste War (see Chapter 44).

Excavation of Level 2, Lot 1 began at the top of the transition to the next natural soil horizon at an average depth of 20 cmbgs. The soil in this level consisted primarily of 5YR 3/3 dark reddish brown silty clay of moderate compaction. Some mottling of 7.5YR 2.5/2 very dark brown was present in the upper portion of the level, and the lower portion of the level contained some mottling of 2.5YR 3/4 dark reddish brown. Patches of darker soil consisting of 5YR 2.5/1 black and 2.5YR 5/1 reddish black were present and appear to be the result of burned and decayed roots. Level 2, Lot 1 was excavated as a natural level, terminating at the transition to the next soil horizon. The level had an average thickness of 35 cm and an average depth of 55 cmbgs. Several other stones were found in the southwest corner of the unit where the rock concentration was first observed. The concentration extended in depth from 14 to 32 cmbgs, though a few smaller rocks were observed at lower depths within the level. The largest stone, which was flat and rectangular, measured 33 x 23 x 10 cm. Another measured 10 x 12 x 8 cm. The other rocks were generally smaller and without form, ranging from 5 to 17 cm in diameter. Some stucco was also present; however, the rock concentration appears to have been without form or organization. A large stone with one flat side was found in the southeast corner of the unit, with its center point being located at the unit coordinates of 27 cm north and 155 cm east. The dimensions of the stone were 20 x 20 cm, with a maximum height of 15 cm. It had a top depth of 37 cmbgs and a bottom depth of 53 cmbgs. It does not appear to be associated with a structure or any other stones in the test pit. No other stones were found in the unit nearby at that depth. It was identified as being a Terminal Classic Puuc-style cut-stone. There is architecture of this style located at the upper part of the Fortín, and this stone may have been brought to the lower Fortín for use in its construction during the Caste War occupation. While there was a decrease in the density of historic material in the level, there was an increase in Prehispanic ceramics. Historic cultural material in the level consisted of one piece of clear glass and two unidentified metal fragments. The level contained a total of 41 ceramic sherds, 29 of which were unidentified. Identified ceramic sherds dating to the Terminal Classic consisted of seven Muna Slate, one Sacalum Black on Slate, two Teabo Red, and one Ticul Thin Slate. One Sierra Red sherd associated with the Late Formative Period was also recovered. The level is considered to be associated with the historic occupation of the fort, with Prehispanic material being in a mixed context.

The level was changed to Level 2, Lot 2 at the transition to the next soil horizon at an average depth of 55 cmbgs, though some areas are slightly higher or lower. Soil consisted of a relatively uniform 2.5YR 3/4 dark reddish brown very compact *chac lu'um* silty clay. The level was terminated at an average depth of 75 cmbgs when darker patches of soil were observed. Level 2, Lot 2 had an average thickness of 20 cm. A root burn with moderate amounts of charcoal was noted in the southeast corner of the test pit, with a top depth near the base of Lot 1 at 53 cmbgs and a bottom depth of 60 cmbgs. Faunal material recovered from the level consisted of one possible modern rodent bone fragment and one possible deer bone fragment that may be from the 19th or 20th century. A total of four pieces of lithic debitage were recovered in the level. Two were noted as having been from the southwest quarter of the unit between 55 and 70 cmbgs, and another was recorded at 57 cmbgs in the northwest quarter of the unit at the coordinates of 160 cm North and 40 cm East. The lithic material consisted of a primary flake measuring 33 mm wide, 37 mm long, and 14 mm thick; a core fragment 32 mm wide, 31 mm long, and 21 mm thick; a thinning flake 21 mm wide, 32 mm long, and 4 mm thick; and a proximal flake fragment 16 mm wide, 22 mm long, and 3 mm thick. All four pieces of lithic debitage were chert of 5YR 6/6 reddish yellow in color. Prehispanic ceramics consisted of 49 sherds, 23 of which were unidentified. Identifiable sherds from the level associated with the Terminal Classic Period included 21 Muna Slate, one Sacalum Black on Slate, and one Yokat Striated var. Yokat. Sherds dating to the Early Classic consisted of one Balanza Black, one Caucel Trickel on Red, and one Xanaba Red. The level is believed to be associated with the Terminal Classic component of the site, though there may be some mixing with both the Historic and Early Classic components.

Excavation of Level 2, Lot 3 was started when darker patches of soil were observed in much of the test pit at an average depth of 75 cmbgs. Soil remained primarily 2.5YR 3/4 dark reddish brown very compact *chac lu'um* silty clay; however, it was mottled with darker 2.5YR 2.5/2 very dusky red patches throughout the level. These were particularly visible and larger in the northwest corner and in much of the southwest quarter of the unit. Another smaller patch was present along the north wall near the northeast corner. These were later determined to be the result of burned or decayed roots. Soil became mottled with 2.5YR 3/6 dark red with depth, and the level was terminated when the soil had transitioned to being predominately of this color. The level was terminated at an average depth of 85 cmbgs and had an average thickness of 10 cm. Several small pieces of eroded calcite, 10YR 8/1 white in color, were observed near the top of the level and appear to be natural. Several very small pieces of burned calcite, 10YR 7/1 light gray in color, were also noted. These may also have been natural and were not collected. Small amounts of burned rock and clay were noted in the western portion of the test pit but not collected. The level contained one piece of faunal material consisting of a bird bone fragment that was recovered near the top of the level along the north wall near the northeast corner of the unit. The bone fragment may have been from the 19th or 20th century. Twenty Prehispanic sherds were recovered from the level. Identifiable ceramics consisted of four Teabo Red sherds and five Muna Slate sherds, all dating to the Terminal Classic. Based on these ceramics, the level is believed to be associated with the Terminal Classic component of the site.

Level 3, Lot 1 excavation was started at the natural level where the soil had transitioned to being a nearly uniform 2.5YR 3/6 dark red very compact *chac lu'um* silty clay. This was at an average depth of 85 cmbgs. Three main areas consisting of 2.5YR 2.5/2 very dusky red silty clay that was much more friable than the surrounding matrix remained present in this level. These areas are believed to be the remains of decayed and possibly burned large roots. Lot 1 was excavated in 5 cm increments. It was noted that artifact density was

decreasing. As a result, the excavation strategy was changed to that of an arbitrary metric stratigraphic level. The entire 2 x 2 m test pit was leveled-off and taken to an average depth of 110 cmbgs. Level 3, Lot 1 had an average thickness of 25 cm. The 25 cm level contained a total of 20 ceramic sherds, 11 of which were unidentified. Identifiable ceramic sherds associated with the Terminal Classic period consisted of four Muna Slate and one Ticul Thin Slate. One Lucha Incised sherd belonging to the Early Classic was recovered from the level. Three Sierra Red sherds dating to the Late Formative period were also recovered. Level 3, Lot 1 is considered to date to the Terminal Classic period, based on the most recent ceramics in the level.

Due to the decrease and relatively light density in cultural material, as well as the absence of features in the previous level, it was decided that the most efficient way to proceed would be to excavate only a portion of the 2 x 2 m test pit. A 1 x 1 m area would be excavated in order to determine if there was a change in artifact density or if an earlier cultural component was present below this level. The southwest 1 x 1 m corner of Operation 9 was chosen to be excavated, as the south and west walls exhibited the rock concentration from the earlier levels in profile. Level 3, Lot 2 was set up as the 1 x 1 m area in the southwest corner of the unit and was excavated in 5 cm increments, beginning at 110 cmbgs. Soil remained a nearly uniform 2.5YR 3/6 dark red very compact *chac lu'um* silty clay. Some dark stains consisting of 2.5YR 2.5/1 reddish black and 2.5YR 2.5/2 very dusky red soil were observed by a depth of 135 cmbgs. These were determined to be the result of burned or decayed roots. A few small pieces of limestone were present, likely having been moved downward by roots. No cultural material was recovered from Level 3, Lot 2 to an average depth of 155 cmbgs. As a result of the 45 cm thick level being culturally sterile, Operation 9 was terminated at that depth.

Upon completion of excavation of Operation 9, the south, west, and north walls were cleaned, photographed, and profiled (Figures 29 and 30). Modern material was placed at the maximum depth of the excavation to serve as a future reference marker. All excavated soil and rocks were backfilled into the test unit.

Operation 9 at the Fortín de Yo'okop contains archaeological material from two distinct, stratified cultural components. Level 1, Lots 1 and 2, and Level 2, Lot 1 appear to be associated with the historic construction and occupation of the Fortín by the Federal troops during the later part of the Mexican Caste War in the late 19th and early 20th centuries. Some mixing of cultural material is present in these levels, and it is unclear to what degree the Prehispanic component of the site has been disturbed overall by the historic construction and occupation. However, the site does seem to have an at least partially intact Prehispanic component located stratigraphically below the historic cultural horizon. This is represented by cultural material belonging to Terminal Classic Period that was recovered from Level 2, Lots 2 and 3, and Level 3, Lot 1. Earlier intact components could also be present in other areas of the site. Cultural material belonging to the Early Classic and Late Formative periods was recovered in this test unit, although from mixed contexts. It is hoped that future research will provide a better understanding of both the historic Caste War and Prehispanic occupations of the site.

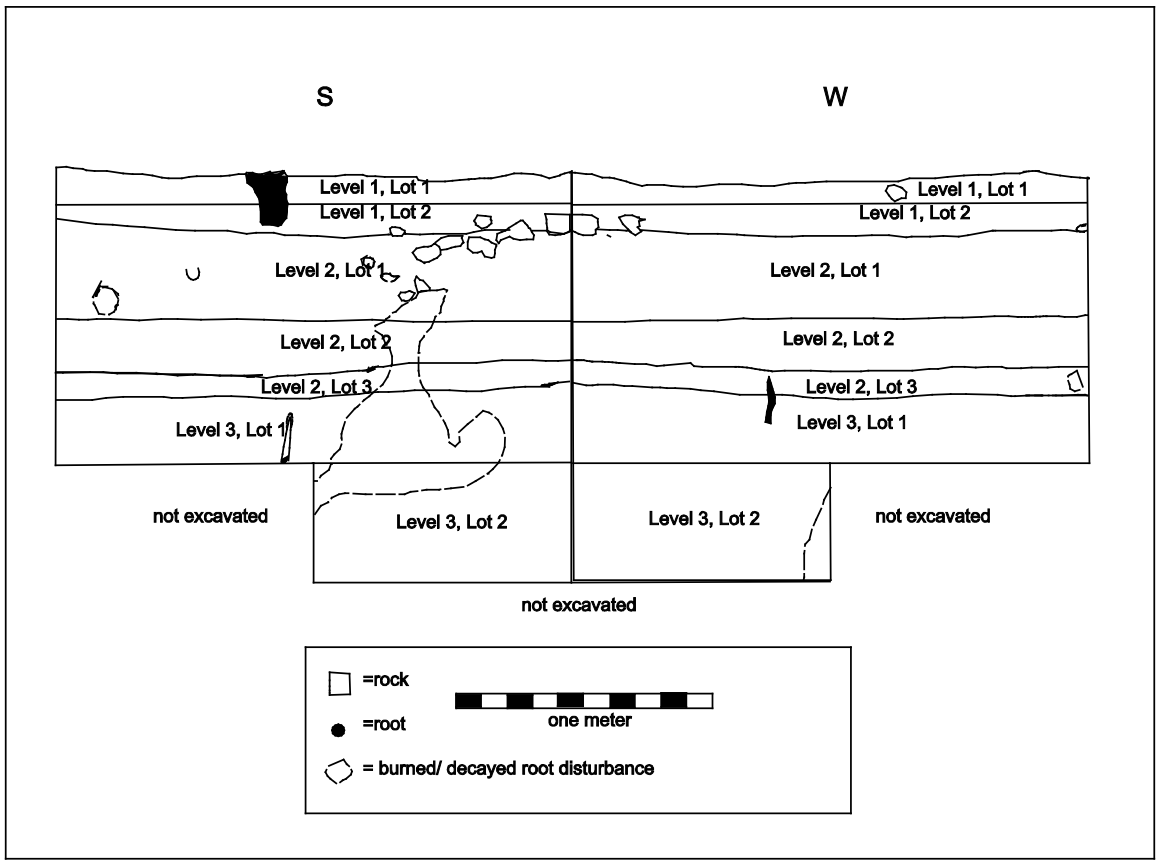


Figure 29. Fortín de Yo'okop, Operation 9, South and West Profiles

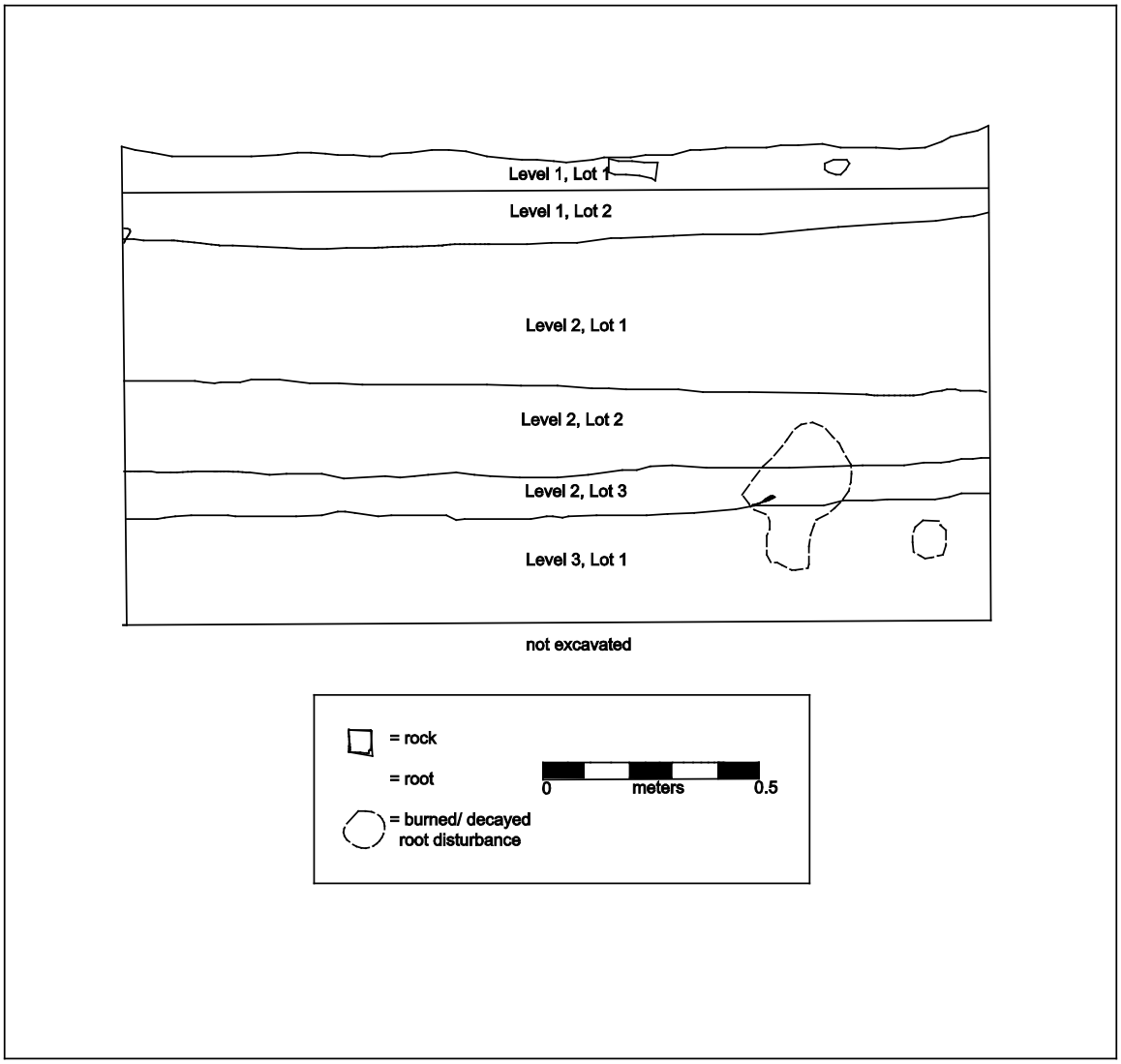


Figure 30. Fortín de Yo'okop, Operation 9, North Profile

Part 2: The *Ejido* of Saban

Chapter 7: Fortín de Yo'okop, Operation 10

Alejandra Badillo

Operation 10 was a 2 x 2 m test pit, which was located on the interior area of the Fortín of Yo'okop, specifically in the SW bastion (Figure 4). This excavation was conducted in order to identify possible architectural elements that might give hints about the kind of Prehispanic structures that were in this location before the military occupation, in addition to obtaining ceramic samples to establish a relative date. Moreover, this unit was designed to get a better understanding of the construction system of the fortification, as well to define activity areas.

This excavation was carried out following natural and cultural levels. Prior to the beginning of the excavation, all the vegetation was cleared. Level 1, Lot 1 was a dark reddish brown, clayey sediment (5 YR 3/2) with low compaction, which had abundant fine roots and organic matter. This level was 8-to-9 cm thick, and contained several historical glass artifacts, which were green, translucent, and aqua in color, in addition to bone fragments of animals that display traces of activity, including pig bone that was cooked (see Chapter 44; Table 27).

Below this level, a change in the soil color to a dark reddish brown (5 YR 3/3) was detected, which was named as Level 2, Lot 1 (Figure 31). This layer was a silty-clay sediment, with low-to-medium compaction, with several yellowish-red (5 YR 4/6) spots. This deposit was 9-to-10 cm thick. Within it, ceramic sample were located, along with historical materials such as fragments of bottle bodies, several that were amber in color with a characteristic shape of the completion of the crown top in a green tone. Ceramics from this level were of the Terminal Classic Muna Slate type. In addition, bone fragments of pigs that showed signs of had been cooked and cut with a metal tool were located.

Following this lot, a tonal change in the soil was detected; therefore Lot 2 was created. Level 1, Lot 2 had a series of spots without any particular arrangement. The color of the spots was dark reddish brown (5 YR 3/3 and 3/4) and dark reddish gray (5YR 4/2), which continued for the following 10-to-12 cm in depth. In this level, a wider variety of ceramic types were located; among these are samples of Early Classic Xanabá Red, Yokat Striated: Variety Yokat and Muna Slate from the Terminal Classic, and Postclassic Chen Mul Modeled (Figure 32). This mixture of ceramics may have been caused by the removal of soil that was conducted in the nineteenth century in order to construct the fortification and level the surface surrounding the military complex. In addition, several glass bottle fragments were recovered. Among these were dark green fragments, a transparent termination fragment of the crown-top type, and two samples of an unidentified white opaque glass object.

Subsequently, the-above mentioned spots became more intense, and also combined with charcoal, and 5-to-10 cm rough stones that were spread in all excavation area. To distinguish the difference in content, Level 3, Lot 1 was established. This level was a dark red sediment (2.5YR 3/4), mixed with red (10R 3/6) and dark red (3/6 2.5YR) inclusions (Figure 33). Several of the stones that were burned had a light olive brown-to-olive brown color (2.5Y 4/4 and 5/5). Terminal Classic ceramic types such as Teabo Red and Muna Slate were included, among others, and a few Late Formative Laguna Verde Incised sherds and one

Figure 31. Fortín de Yo'okop, Operation 10, Level 2, Lot 1

Figure 32. Fortín de Yo'okop, Operation 10, Level 2, Lot 2

Figure 33. Fortín de Yo’okop, Operation 10, Level 3, Lot 1

Early Formative Dzudzuquil Cream to Buff sherd was found.

Also within this lot, at 52 cm in depth, a 30-cm-long hole in the southwest side was located; it was product of an animal agent, since it was found that the soil was removed and the compaction was low. This level had very fine roots and 3-20 cm long irregularly shaped stones continued over the next 38-36 cm. Green, transparent, and amber glass fragments, as well as bones samples, were located. It was noticeable that, among these, fragments of deer ribs were collected.

A new lot was established when the matrix of soil changed. Level 3, Lot 2 was a dark red (2.5YR 5/6) sediment, mixed with streaks in reddish brown and red tones (2.5 YR 4/3 and 4/6), and several stones pale orange yellow (10YR 4/2). This lot had a depth of 20 to 22 cm thick (Figure 34).

After this lot, the sediment turned redder (2.5YR 4/8). For that reason, it was decided to switch to Level 3, Lot 3, which was a deposit with medium compaction, silty-clay in texture, mixed with small stones and rough concretions 1-to-3 cm long that reached 32-to-34 cm in depth. Within this lot several samples from Terminal Classic, as well as examples from Late and Early Formative were documented (Figure 35).

An area with different characteristics was identified, which was considered Level 3, Lot 4. This lot begins at 89 cm in depth below the surface. It has a circular shape, with a diameter of 35 cm, and was 61 cm deep. Level 3, Lot 4 had a fine clayey texture, low compaction, and a gray (pale red 2.5YR 6/2) and reddish brown (2.5YR 5/3) color. At the bottom area of this lot, a feature shaped like two inverted cones was observed, as shown in the profile maps (Figures 36 and 37). In association with this level, a few bone fragments were located, possible from a pig; one of these was charred.

Finally, due the lack of archaeological material at this depth, it was decided to reduce the excavation the eastern half of the unit (Level 3, Lot 5). The color of the sediment turned redder (2.5 YR 4/8), and its composition was finer and clayey, with a low compaction. This lot was also mixed with gravel that was reddish in color (Figure 38). Level 3, Lot 5 was excavated until it reached 1.37 m below the surface, and at this point the excavation was concluded (Figures 39-41).

Once all the registration of the excavation was completed, all sediment was backfilled and with this process the excavation of Operation 10 was concluded (Figures 42 and 43).

Interpretation

Information obtained from this excavation made it possible to obtain a better understanding of the use of the SE Bastion, which along with the redoubt and the NW Bastion form the frontal face of the fort. In addition, this excavation allowed us to know more about the construction of the fortification.

It is known from historical documents, as well as the reports published by *Mexico Militar* magazine, that the operation line from Peto to Chan Santa Cruz laid a telegraph line in

Figure 34. Fortín de Yo'okop, Operation 10, Level 3, Lot 2

Figure 35. Fortín de Yo'okop, Operation 10, Level 3, Lot 3

Figure 36. Fortín de Yo’okop, Operation 10, Level 3, Lot 4

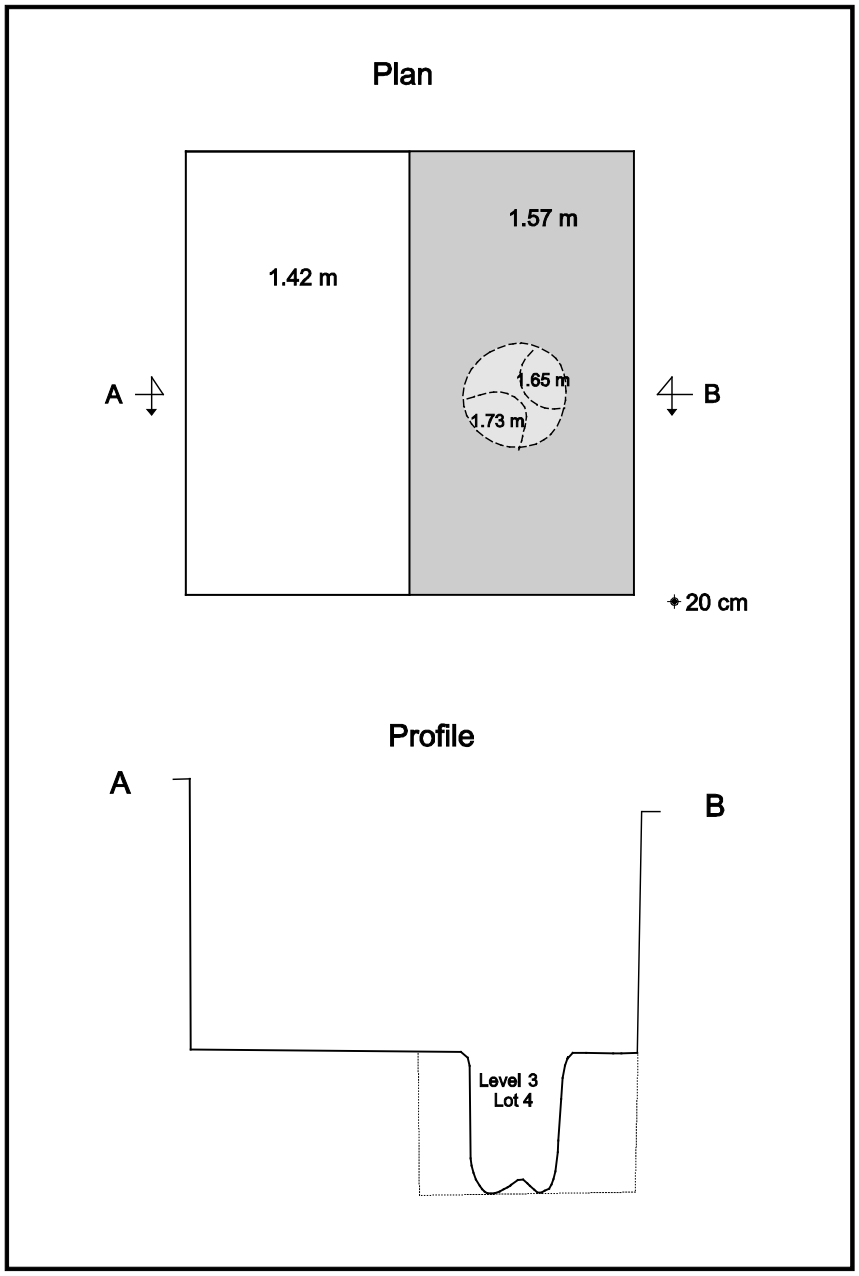


Figure 37. Fortín de Yo'okop, Operation 10, Level 3, Plan and Profile

Figure 38. Fortín de Yo'okop, Operation 10, Level 3, Lot 5

Figure 39. Fortín de Yo'okop, Operation 10, Level 3, Lot 5, Conclusion

Figure 40. Fortín de Yo’okop, Operation 10, Level 3, Lot 4, Conclusion

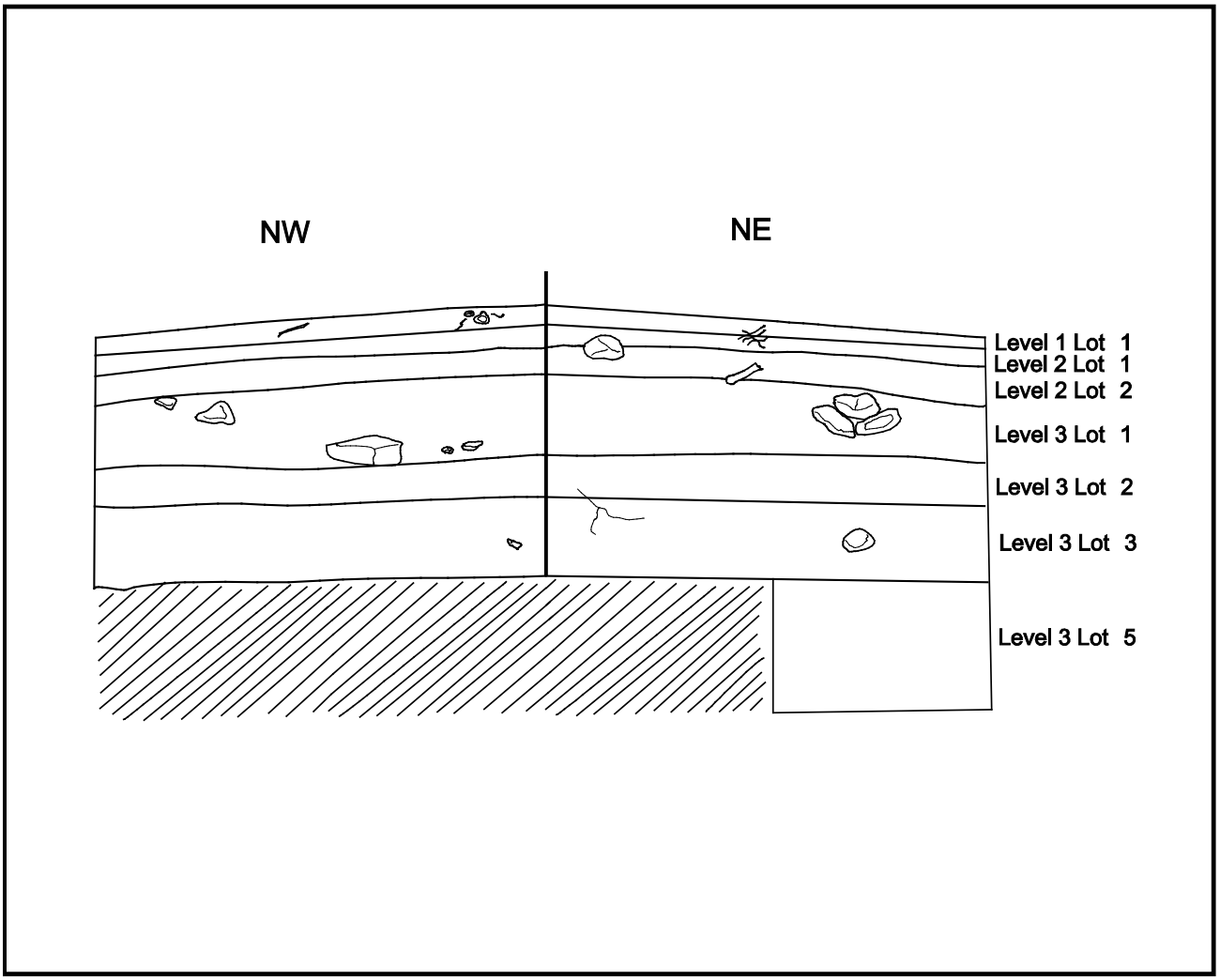


Figure 41. Fortín de Yo'okop, Operation 10, Northwest and Northeast Profiles

Figure 42. Fortín de Yo'okop, Operation 10, Backfilling

Figure 43. Fortín de Yo'okop, Operation 10, Backfilled

order to communicate all positions established as well as to communicate with the extensive network of telegraph that existed in the republic in the late nineteenth century (MM, 1901: 409.410). Moreover, an old photograph from the photo album "*Memories of the visit of Governor Canton in 1901*" (Badillo 2010: 18), which serves as a graphic record of this fortification, shows that in the NW Bastion there was not any type of roof. Therefore, it can be speculated that SE Bastion never was roofed. If this is correct, then the evidence found in this excavation (at Level 3 Lot 4) may correspond to a telegraph post hole.

The base of the post hole begins at 89 cm below the surface, which could have been the original surface occupied by the military during the construction of the fort, or at least, this was the level of the SE Bastion (Level 2, Lot 2). The mixture of ceramic samples found at this lot could corroborate this assumption, since this pattern may have been caused by the extensive removal of sediment carried out by the militia.

Evidence indicates that the hole for the post was 35 cm in diameter, and reached 61 cm deep from the occupational surface. According to evidence located at the bottom of the hole, the excavation of this took place using a wooden crowbar that was about 15 cm in diameter. Traces observed in the hole show two conical marks that hint the shape of the crowbar and the movements of the excavators of the hole.

With regards to construction of the fort, this excavation produced some insights about this process. For instance, Level 3, Lot 1 corresponds to the previous stage of the construction of the fort, when the area was burned in order to clear the vegetation.

After the cleaning, a new ground level was created. It is probable that the construction of the fort began with the outline of the bastions and the curtain walls that formed this fortification, and the excavated material from the moat was used to create an inner surface (Level 2, Lot 2), which would explain the changes and mixture in the previous levels. The surface for the military occupation corresponds to Level 2, Lot 1.

Level 1, Lot 1 can be explained as the accumulation occurred since the fort was abandoned after the Caste War to the present, mainly composed of organic matter.

Part 2: The Ejido of Saban

Chapter 8: Fortín de Yo'okop, Operation 11

Alejandra Badillo

Operation 8 was located inside the SE Bastion (Figure 4), and was designed with the goal of getting a better understanding of the activities in this area, as well as defining the Prehispanic occupation. This unit was a 2x2 m test pit, and was excavated following a combination of arbitrary and cultural levels.

The work in this unit began with the removal of leaves and organic matter from the surface, in order to locate the upper face of Level 1, Lot 1. This layer was a clayey sediment, with low compaction and a dark reddish brown color (5 YR 2.5YR 3/3 to 3/2). The sediment was mixed with a large amount of fine roots and rootlets and several fragments of glass bottles (Figures 44 and 45).

After having excavated 4-to-15 cm deep, the color of the soil changed to a dark red (2.5YR 3/4), and the degree of compaction went from low-to-medium. For this reason, a new lot (Lot 2) was created with the aim of having better control during excavation. Level 1, Lot 2 was 10-to-17 cm thick (Figure 46).

Below this lot, Lot 3 was established because the soil had a color difference, as well as a series of dark spots with a silt-clayey texture. This lot had a medium to low compaction, was dark reddish brown in color (5 YR 3/2) with yellowish red areas (5YR 4/6), and contained several burned stones of a gray-to-dark gray color (10YR 5/1-to-10YR 4/1). The average thickness was from 4-to-10 cm (Figure 47). In the southeast section of this lot, a concentration of charcoal and stones (of 13-20 cm long) was noted, along with a rectangular metal artifact of round corners. Preservation of this feature was poor; it was fragmented but it could be observed that it was 60 cm long. Although this artifact was found *in situ*, its shape was modified due its poor preservation and condition (see Chapter 44, Table 26) (Figure 48). Moreover, in this lot a cartridge clip for firearm was located.

Underneath this lot, a different deposit was located, which did not cover the entire extent of the unit, only being focused on the north side. This layer was named Level 1, Lot 4, and it corresponds to a cultural lot, which was composed of two sections. The first was 3-cm thick, and was a reddish black soil mixed with charcoal (2.5 YR 2.5 / 1) with a very fine texture, on which lay a deposit of a very pale brown sediment (10YR 7/4), 2-cm thick with a sandy texture. This last deposit seems to have been of *sascab* (limestone powder). Both sections of this lot had a very low compaction (Figure 49).

Under the above mentioned metal object in Level 1, Lot 3, a metal sheet apparently in its original position was located, but this metal feature was small in size and was fragmented. For that reason, it was separated in a different lot, Level 1, Lot 5 (Figure 50).

Level 2, Lot 1 was a cultural sediment, which contain ash within a matrix of fine-grained soil with low compaction, with a reddish brown color (5 YR 4/3) and dark reddish gray

Figure 44. Fortín de Yo'okop, Operation 11, Surface

Figure 45. Fortín de Yo'okop, Operation 11, Level 1, Lot 1

Figure 46. Fortín de Yo'okop, Operation 11, Level 1, Lot 2

Figure 47. Fortín de Yo'okop, Operation 11, Level 1, Lots 2 and 3

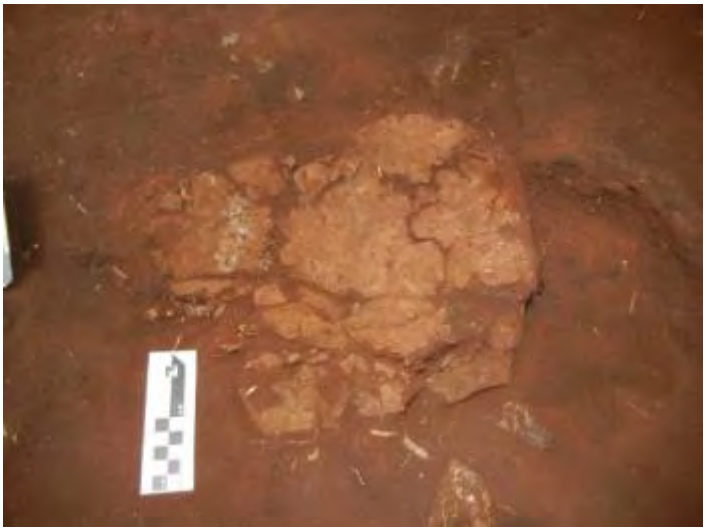


Figure 48. Fortín de Yo'okop, Operation 11, Level 1, Lot 3

Figure 49. Fortín de Yo'okop, Operation 11, Level 1, Lot 4

Figure 50. Fortín de Yo’okop, Operation 11, Level 1, Lot 5

spots (5YR 4/2) (Figure 51).

Within the above-mentioned level a bonfire was located, defined as Level 2, Lot 2; it consisted of irregular stones resting against each other forming a sort of circle measuring 63 cm on its north-south axis and 58 cm at its east-west axis. This feature was 20 cm high on the outside, while it was 16 cm thick in the inner area.

This feature had a significant quantity of pieces of charred wood, one of which contained a 2-inch nail. The metal feature was placed above this charred wood. Due the fire that was ignited in this bonfire, several rocks are burnt, displaying a different color that ran from black-to-reddish brown (Figure 52).

Once this feature was completely exposed, excavation continued only in the western side of the unit, in an area of 80 cm x 2 m, in order to avoid altering the architecture of the bonfire. It is noteworthy that this feature was consolidated with a mixture of sascab and lime, with the aim of ensuring its shape and preservation (Figure 53).

After the above-mentioned layer, Level 3, Lot 1 was excavated. This stratum was a silt-clayey sediment, with a medium compaction, and a dark red color (2.5YR 3/6) (Figure 54). Within this lot, only a few archaeological remains were found, such as several unidentified ceramic samples. As the excavation continued, no sherds were located; therefore, at a given depth, the unit was considered sterile. For that reason, the excavation was concluded at 55 cm in depth (Figures 55-57).

Finally, at the bottom of the excavation unit several plastic markers were placed in order to indicate the depth reached for future reference. During the backfilling of the test pit all soil that was removed during excavation was replaced and the bonfire was carefully covered with layers of fine soil (Figures 58 and 59).

In respect to the Prehispanic material recovered, several ceramic sherds were located, including Terminal Classic and Late Classic Muna Slate and Arena Red respectively, but these were mixed with metal artifacts from nineteenth and twentieth centuries (see Chapter 44).

Interpretation

Below the current surface, within fort, according with the information obtained in this unit, it was possible to define several levels and lots, whose origin was the result of various agents, whether by natural or human action, as well as processes in which such agents contributed to the formation of the history of the site.

Results from Operation 11 suggest that Level 3, Lot 1 may correspond to the period of the occupation of the fort by the militia before 1898-1899. This sediment could have been carried by human action to the level of the surface, once that the base of the walls and the bastions had been built.

Occupation by federal military in the area began in late 1899. In the place there were different areas of activity; inside the fort several battalions were housed, and this complex operated as a small town. This establishment had a medical facility, bakery, surveillance and communication areas, zones to guard weapons, and a cattle ranch, among other

Figure 51. Fortín de Yo’okop, Operation 11, Level 2, Lots 1 and 2

Figure 52. Fortín de Yo’okop, Operation 11, Level 2, Lot 2, Bonfire

Figure 53. Fortín de Yo'okop, Operation 11, Consolidated Bonfire

Figure 54. Fortín de Yo'okop, Operation 11, Level 3, Lot 1

Figure 55. Fortín de Yo’okop, Operation 11, End of Excavation

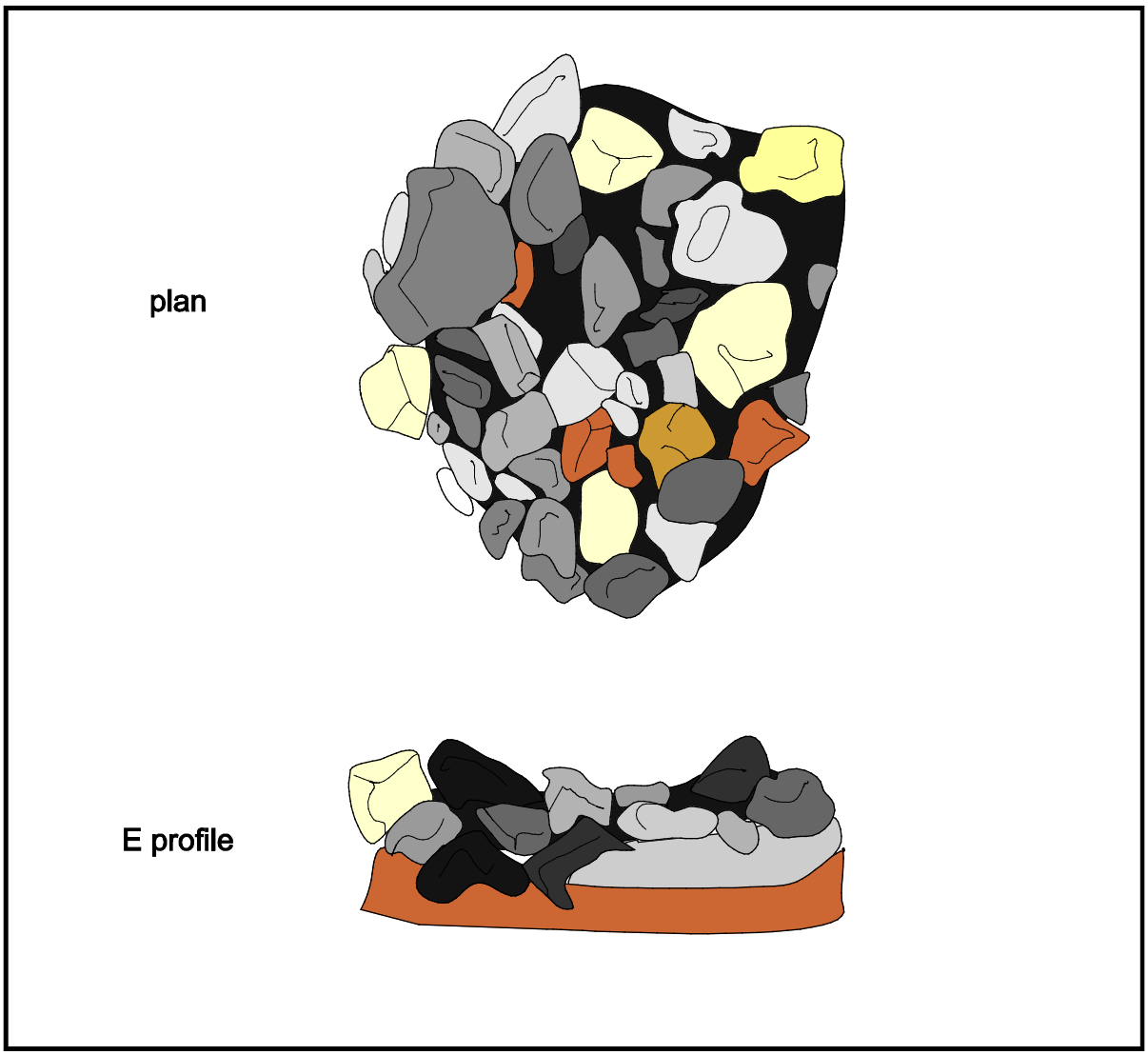


Figure 56. Fortín de Yo'okop, Operation 11, Bonfire Plan and Profile

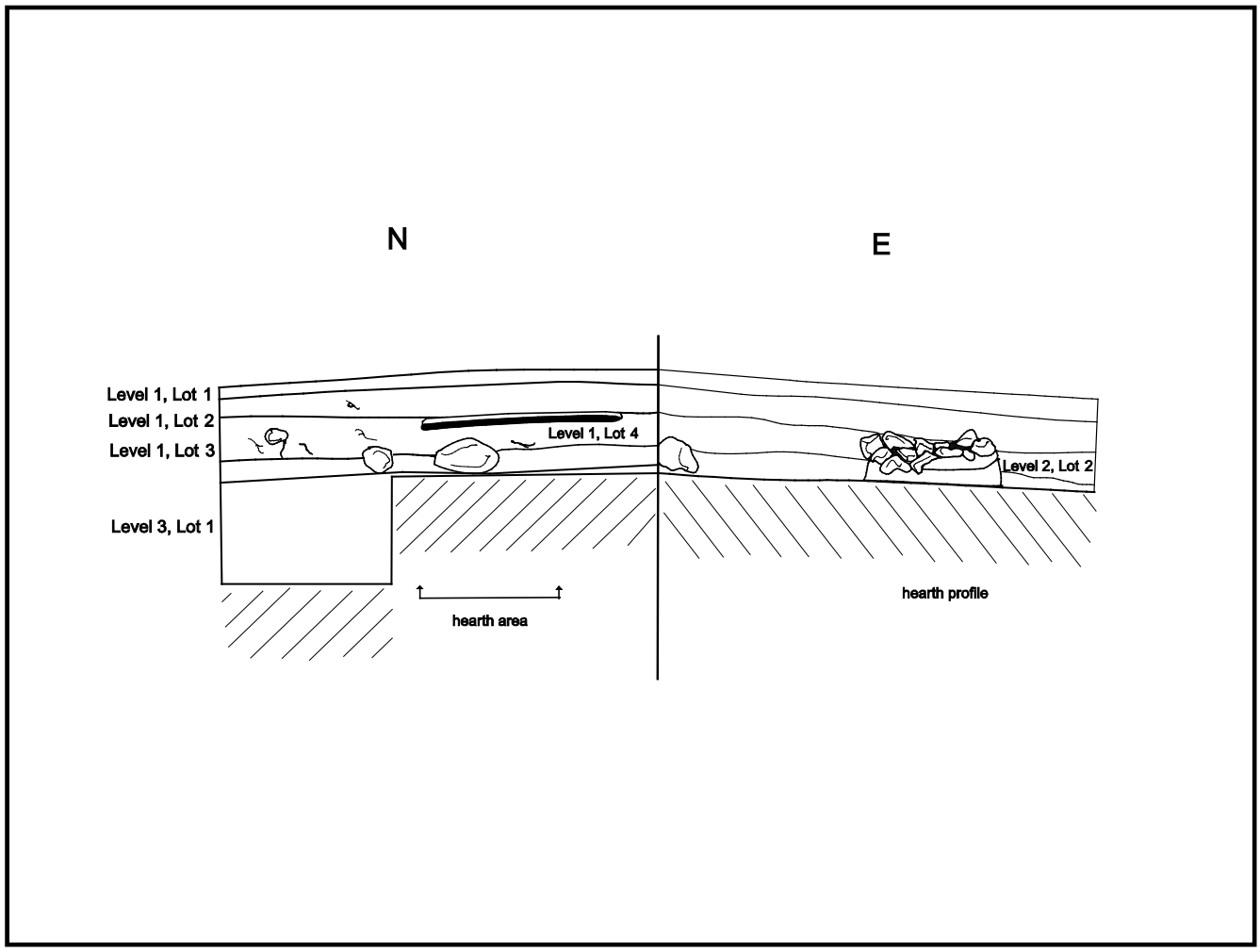


Figure 57. Fortín de Yo'okop, Operation 11, North and East Profiles

Figure 58. Fortín de Yo'okop, Operation 11, Backfilling Process

Figure 59. Fortín de Yo'okop, Operation 11, Backfilled

infrastructural components (Badillo 2010).

Based on the excavations carried out so far, it can be argued that the south wing of the fort was dedicated to food preparation. Apart from the well-known ovens outside the fort, this unit revealed a feature *in situ* that adds evidence to this supposition. This feature had indication of use that should correspond to a date close to its abandonment, since had several pieces of charcoal that were found underneath the a metal sheet and a tray.

With this evidence, it can be supposed that over the bonfire, cooking equipment for food preparation was placed. However its surface may not have been directly used to place cookware upon (Figure 60). Considering the above evidence, along with changes in texture, color, and compaction of the soil around the bonfire, it can be assumed that a wooden support laid over the fire, as a sort of tripod that had been used to hang the cooking pot or other implement above the fire.

With the abandonment of the area, the suspended objects fell, being exposed directly to the irregular contour of the surface of the bonfire. This action would explain the preservation of both metal artifacts, although their original aspect may have been lost.

After the abandonment of the fort, around 1911, a layer of sediment was naturally deposit, Level 1, Lots 3 and 4. A little over a century of accumulation of sediment has covered all evidence of those years of military occupation, the period that marked the end of the Caste War.

Figure 60. Fortín de Yo’okop, Operation 11, Bonfire, Side View

Part 2: The *Ejido* of Saban

Chapter 9: Fortín de Yo'okop, Operation 12

Alejandra Badillo

The Fort of Okop, as it was formerly known, was a military complex consisting of two building clusters. This construction took advantage of the foundation of the remains of an architectural complex from Prehispanic times, which was contemporary with and presumably part of the Classic Maya city of Yo'okop.

Between the two buildings of this military complex, the Fort of Yo'okop and the Fuerte de la Loma (Fort of the Hill), both built during late nineteenth century, there was a transitional area where some alignments made with large rocks are observed (50 to 110 cm wide). These alignments are from Prehispanic times and comprised the basis of a platform. This platform, Structure N2W1-2, is attached at the bottom of a natural elevation (Figure 61), on which the position known as Fuerte de la Loma is located.

This area is where Operation 12 was established, about 5 m north of the aforementioned structure (Figure 4). This excavation unit was planned to define a relative chronology of the area associated with this Prehispanic structure, in addition to better knowing this part of the construction complexes, both from Prehispanic times as well as the nineteenth century military fortifications.

Microtopography of the surface of the unit showed a slight slope descending to the north (Figure 62). It should be noted that in the southern portion of the unit, several stones of different sizes were observed with a pattern suggesting a possible paved stone area. Considering the position of the excavation, it is noteworthy that Operation 12 was shallow. Excavation work began removing a layer of black colored (7.5 YR 2.5 / 1) clay soil with organic matter (Level 1 Lot 1) of low compaction, with abundant thin roots, which reached a maximum depth of 6 cm towards the northwest corner (Figure 63).

Below the organic layer, a cultural level formed of irregular (15 to 50 cm) stones was found. In addition, some well-cut stones, probably from the façade of Structure N2W1-2, were also found. The presence of irregular stones and a few well-cut stones in frontal areas of the structures is generally attributed to the collapse of the façade elements of these buildings. However, in this unit, the stones covered 95% of the total area of Operation 12; thus, it can be surmised that this is an intentional pavement layer constructed by the federal army who built the fortifications during the last decade of the nineteenth century (Figures 64 and 65).

It should be stressed that much of the site contains evidence corresponding to different time periods. Therefore, it is important to distinguish and define which of these elements belong to each episode, as well as which alterations were generated by the modifications that have occurred in the area (Figure 66).

This cultural layer was designated as Level 2, Lot 1. The sediment that it contained was very dark gray (7.5 YR 3/1) in color, and was characterized by mixed well-cut stones and irregular stones of different sizes, arranged side by side in order to level the terrain. This level had a thickness of 10-15 cm. The portion in which no stones were presented was located in

Figure 61. Fortín de Yo'okop, Operation 12, Excavation Area

Figure 62. Fortín de Yo'okop, Operation 12, Surface

Figure 63. Fortín de Yo’okop, Operation 12, Level 1, Lot 1

Figure 64. Fortín de Yo’okop, Operation 12, Stone Pavement

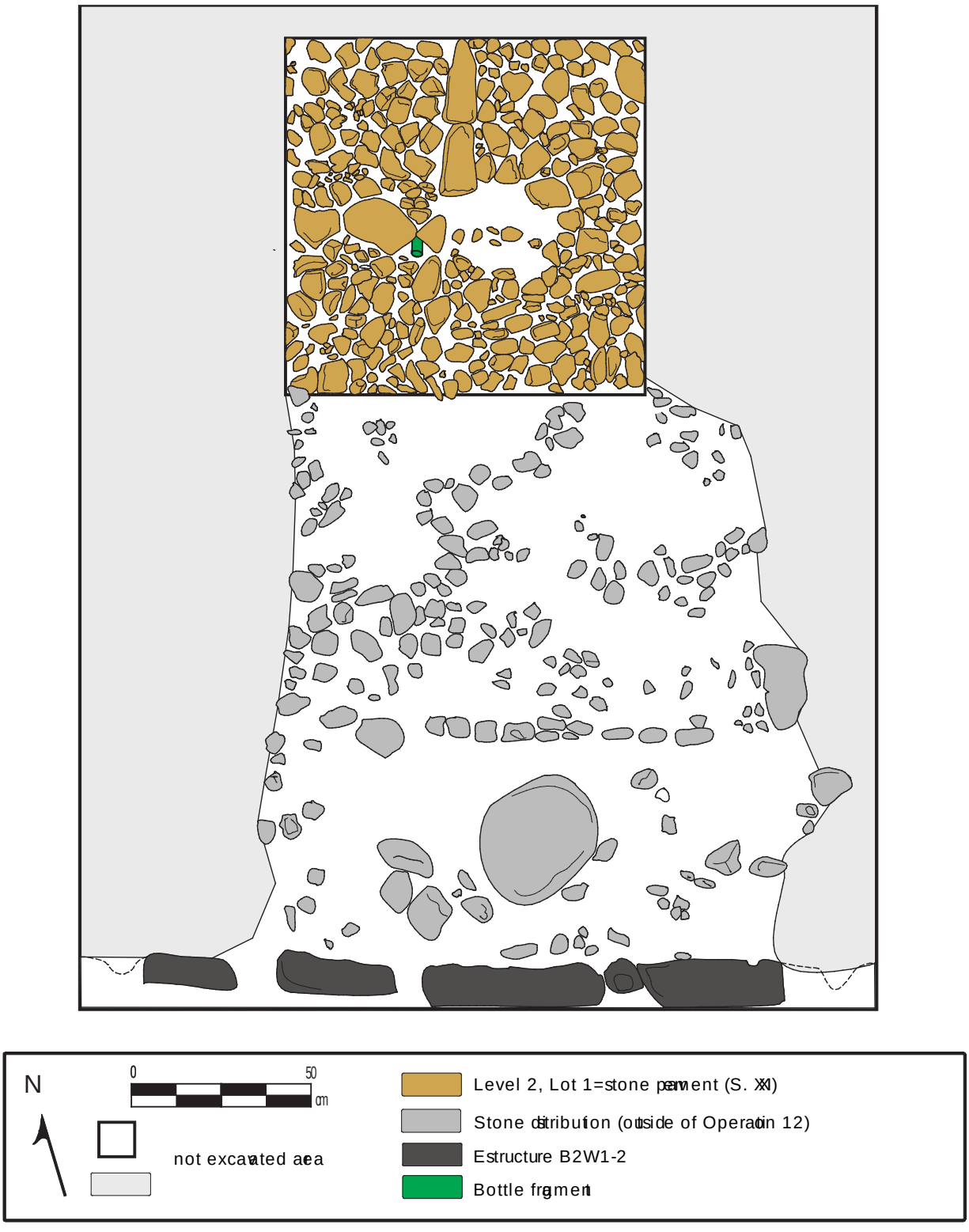
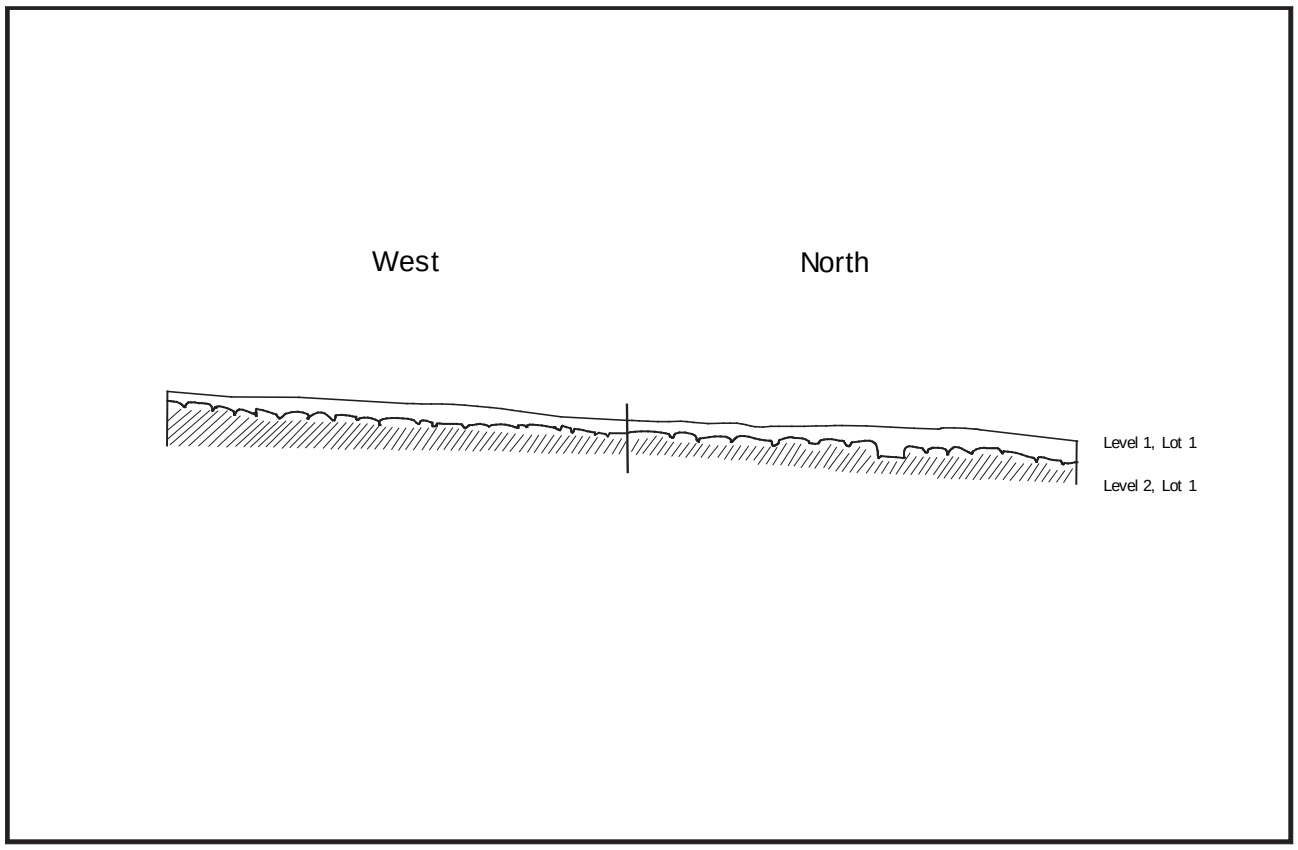


Figure 65. Fortín de Yo'okop, Operation 12, Plan Map of Stone Pavement



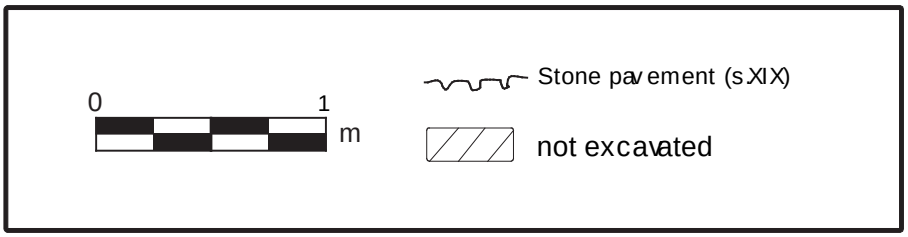


Figure 66. Fortín de Yo'okop, Operation 12, West and North Profiles

the southeast quadrant of the excavation was designated as Level 2, Lot 2 (Figure 67). This lot corresponded to an oval area of 60 by 40 cm, consisting of dark brown (7.5 YR 3/2) sediment, mixed with abundant gravel. Within this level, Prehispanic ceramic material was located, in addition to some fragments from the nineteenth century, including an incomplete bottle located at 17 cm in depth from the surface (Figure 68).

The excavation of this lot continued to about 55 cm in depth, until a series of flat stones between 19 and 25 cm long were observed. This stones were placed side-by-side and without joints. This new cultural layer was designated as Level 3, Lot 1, which included a matrix of reddish brown soil (5 YR 4/3) (Figures 69 and 70).

It is noteworthy that this architectural element was not altered by the excavation work, because we did not have permission from INAH to remove this type of architecture. Therefore, the excavation of this unit reached a maximum depth of 65 cm in the area where the stone pavement was missing, while only 7 cm in depth was reached where pavement was present.

It should be noted that, due to the dynamic nature of this place, materials of different periods are mixed in the same contexts. For example, in Level 1, Lot 1, Terminal Classic ceramic samples along with examples from the Early Classic and Late Formative were found. In addition, various materials from nineteenth century were also located, among which was a cartridge without pods marked with "D. M // 1897 // K ", manufactured by the Mauser brand, as well as a bent wire more than 30 cm long, perhaps used for telegraph.

As for glass materials, fragments of green transparent olive glass bottles were also found in this level. Among these, one piece with an olive green aperture (of grooved ring type) stands from others. This type of bottle is a sample of a specific type of production, as observed the fusion between the neck and nozzle (see Chapter 44).

Historical materials located at Level 2, Lot 1 include fragments that possibly were from a can, while in Level 2, Lot 2, the incomplete bottle above mentioned was located. This artifact is interesting, as it is an example of the use of the technique of mold dipping, as shown in the marks at the base of the shoulder. In addition, this bottle has a decanter that, based upon its shape and color, can be assumed to have contained wine.

After the excavation, and after that the proper registration had been carried out, all soil was carefully backfilled in order to cover the entire stone pavement and the rest of the unit (Figures 71 and 72).

Interpretation

By the nineteenth century this area outside the Fort of Okop was used as a transit area between this fortification and the Fort of the Hill (Fuerte de la Loma). The natural elevation upon which the latter fort is located, must have been a strategic place both in the nineteenth century and during Prehispanic times, because its elevation rose above the surrounding terrain, which would have allowed it to have a very good view of the area.

In this area, below the current surface, a stone pavement (Level 3, Lot 1) was located. This cultural layer must have been prior to, or contemporaneous with, the Early Classic period, which is probably associated with the construction of Structure N2W1-2. This floor or stone pavement was covered with a gravel pack (Level 2, Lot 2) at some point during the Terminal Classic, which was possibly the subfloor of the last surfacing of this area, now

Figure 67. Fortín de Yo'okop, Operation 12, Level 2, Lots 1 and 2

Figure 68. Fortín de Yo'okop, Operation 12, Level 2, Lot 2, Bottle

Figure 69. Fortín de Yo’okop, Operation 12, Level 3, Lot 1

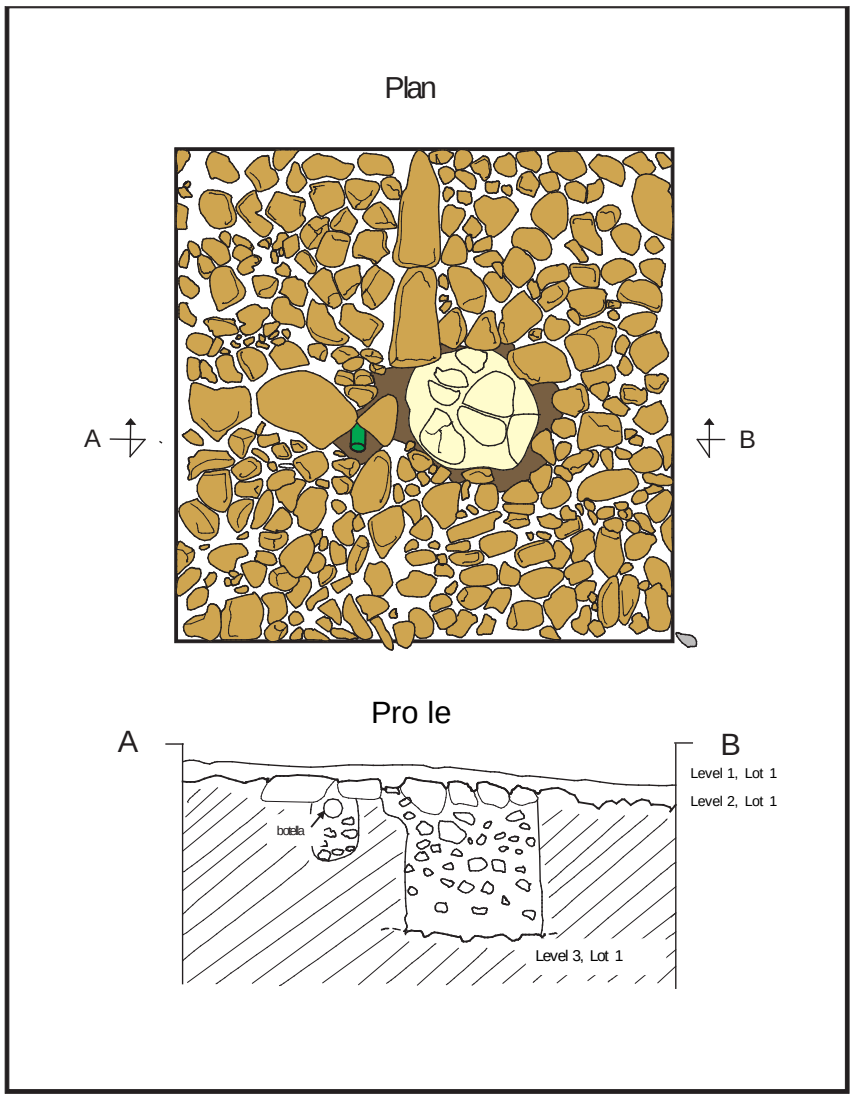


Figure 70. Fortín de Yo'okop, Operation 12, Profile

Figure 71. Fortín de Yo’okop, Operation 12, Backfilling

Figure 72. Fortín de Yo’okop, Operation 12, Backfilled

not found in this excavation. However, this level must have been the last phase of the Prehispanic occupation that took place in this part of the site.

After centuries, in the last decade of the nineteenth century, the area was occupied by a Mexican federal militia whose members were the ones who modified and reused several elements of Prehispanic ruins to build their fortifications. This buildings were constructed during the campaign known as the Military Campaign of Yucatan, which occurred during the last phase of the Caste War. This period is when the transit area between Fort Okop and Fort de la Loma was modified, using the irregular and well-cut stones from the former Prehispanic buildings that existed in the area to create a new pavement.

The level at which the modifications to the construction carried out by the federal militia began is with the subfloor gravel (Level 2, Lot 2). This layer would have been the last construction phase in this earlier settlement; it was adapted and partly dismantled by the federals to create the stone pavement located at Level 2, Lot 1.

In terms of its characteristics, this type of pavement is very similar to the one found in Operation 8 at this site (see Chapter 5) and it also seems to be contemporary. However, it should be noted that some rocks that stood out from the others by being well cut, located near the center of this excavation unit (slightly north and west), were discovered.

The location of these stones might suggest that their placement was intentional and that may have had a specific function; however, further excavations in the area would be required to clarify these suggestions. At the moment, the question of whether these stones were aligned because they are part of some nineteenth century element, perhaps a type of plinth or some other structure that may have used by the military (*e.g.* in a civic act), or just a random pattern that resulted in the incorporation of well-cut Prehispanic stones within the pavement, remain unsolved.

Among the construction fill and paved stone of the nineteenth century cultural material evidence from two different timing periods was found. While ceramics dating back to the Postclassic and Terminal Classic periods were located in the fill; fragments of glass bottles were also recovered, among which is an example of an incomplete wine bottle that based upon its type of manufacturing seems to be from the nineteenth century.

The military occupation in the Fort also left evidence of the actions of artifacts and tools that period. For example, on the stone pavement a piece of wire of 5 mm in diameter which may be used for telegraph network was found. The telegraph was established to maintain communication with other military posts or cities related with federal troops, and was used for logistical issues that related to the organization and conduct of the Military Campaign of Yucatan, as well as the exchange of orders about the supply of goods and the transport and provision of weapons.

The detonated cartridge that was located in this unit, with a mark of D. M // 1897 // K, from Deutche Mauser, whose production is German, indicates that this was part of the ammunition used by the federal troops because the Maya rebel peasants employed Winchester brand cartridges (see Chapter 44). In general the objects found in this operation, as well as their context, are of great help to start to understand part of the history of everyday life in this military complex of Fortín de Yo'okop.

Part 2: The *Ejido* of Saban

Chapter 10: Fortín de Yo'okop, Operation 13

Karleen Ronsairo and Justine M. Shaw

Operation 13 of the Fortín de Yo'okop was a 2x2-m test pit located outside the northeast access point of the smaller fort on top of the hill (Figure 4). The purpose of Operation 13 was to explore the chronology the area, as well as the activities of the Pre-Hispanic people prior to the fort's construction and of the Spanish people who occupied the Fortín de Yo'okop during the Caste Wars. Operation 13 consisted of one natural level and three cultural levels and a mix of Prehispanic and historic material, including Prehispanic ceramics and obsidian blades and historic metal and glass. As demonstrated in the southeast and southwest profiles (Figures 73 and 74), Operation 13 consisted of two floors.

Level 1, Lot 1 of Operation 13 consisted of loose soil with small cobbles. Large irregular rocks appeared at about 10-19 centimeters below surface. These large irregular rocks may have been collapse from the narrow entrance of the fort built on top of a Prehispanic structure and built out of recycled rocks from this Prehispanic structure. The ceramics recovered from Level 1, Lot 1 of Operation 13 belong to the Terminal Classic, as evidenced by the Yokat Striated var. Applique, Yokat Striated var. Yokat, Muna Slate, Sacalum Black on Slate, and Tekit Incised types. Level 1, Lot 1 also consisted of three obsidian blade fragments and two chert flake fragments.

After encountering the large irregular rocks in Level 1, the excavation of Operation 13 continued on to Level 2 (Figure 75). After considering the arrangement of the large irregular rocks in the unit, Level 2 was separated into four lots (Figure 76). Level 2, Lot 1 consisted of the large irregular rocks concentrated in the middle and in the southeast corner of the unit. Level 2, Lot 2 was in the east side of the unit and consisted of gravel encountered at about 50 centimeters below surface, beginning with with small cobbles, then medium-sized cobbles (Figure 77). The gravel in Level 2, Lot 2 was evidence of a floor, which was not immediately recognized in the excavation of this lot. Therefore, the excavation of Level 2, Lot 2 was more profound than Lots 3 and 4. Lots 3 and 4 of Level 2 were excavated until gravel was encountered in order to transition to a new cultural level in the excavation of Operation 13.

After removing the large irregular rocks from Level 2, the excavation of Operation 13 continued on to Level 3, which consisted of three lots (Figure 78). The ceramics

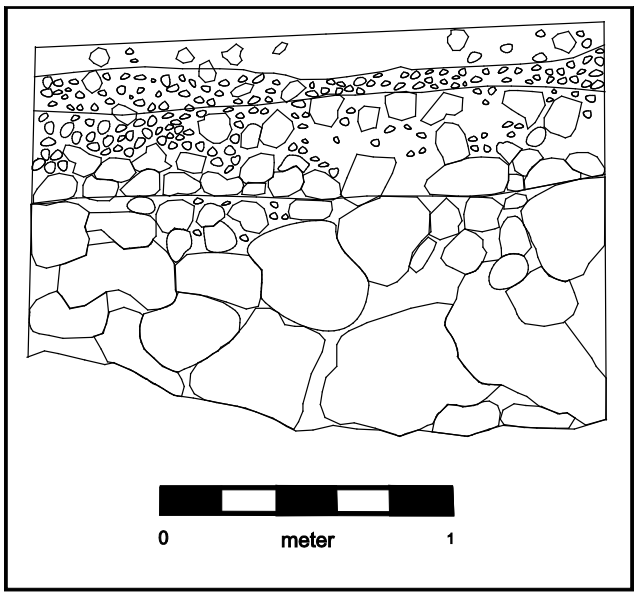


Figure 73. Fortín de Yo'okop, Operation 13, Southwest Profile

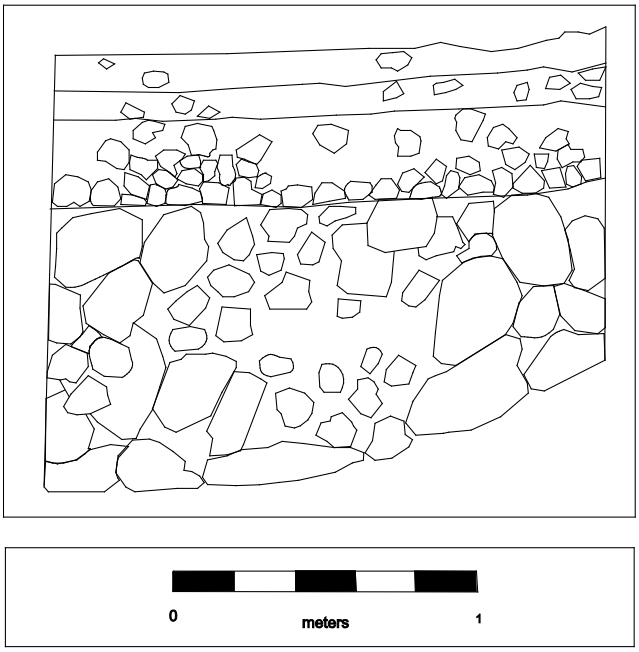


Figure 74. Fortín de Yo'okop, Operation 13, Southeast Profile

Figure 75. Fortín de Yo'okop, Operation 13, Level 2, Lot 1

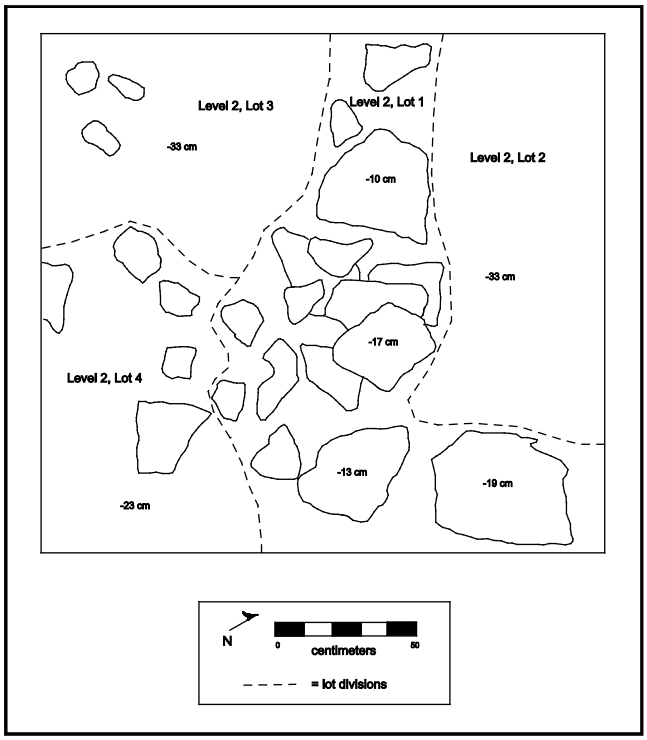


Figure 76. Fortín de Yo'okop, Operation 13, Level 2, Lots 1-4, Plan Map

Figure 77. Fortín de Yo'okop, Operation 13, Level 2, Lot 2

Figure 78. Fortín de Yo'okop, Operation 13, Level 3, Lots 1-3

recovered from Level 3 belong to the Terminal Classic, as evidenced by the Yokat Striated var. Yokat, Muna Slate, Sacalum Black on Slate, Teabo Red, and Ticul Thin Slate types. Level 3, Lot 1 of Operation 13 consisted of gravel with dark brown soil and small cobbles that made up Floor 1 (Figures 73 and 74). After removing the soil and gravel from Level 3, Lot 1, Level 3 was separated into Lots 2 and 3 due to differences in soil composition (Figure 79). As demonstrated by the southwest profile, Level 3, Lot 2 consisted of gravel with light brown, compact soil and small- to medium-sized cobbles that made up Floor 2 (Figure 80). Moreover, as demonstrated by the southeast profile, Level 3, Lot 3 consisted of medium-sized irregular rocks that made up construction fill (Figure 81).

Interpretation

The presence of two floors illustrated in the southwest and southeast profiles (Figures 73 and 74) allows us to conclude that the Prehispanic occupation of the Fortín de Yo'okop consisted of at least two construction phases prior to the Spanish occupation of the site. However, the excavation of Operation 13 was terminated early due to instability of the dry core fill. This prevented us from exploring earlier construction phases of this site.

The excavation of Operation 13 at the Fortín de Yo'okop also allowed us to investigate the Spanish occupation of this site during the Caste Wars. Historic metal and glass were recovered from Operation 13, including twisted wire. Although these materials do not provide direct evidence of specific activities of the site's Spanish inhabitants, it allows us to determine that there was some sort of activity outside of the forts' walls. These activities might have included recycling rocks from Prehispanic structures to construct the fort.

Aside from investigating the construction phases in this area of the Fortín de Yo'okop, the excavation of Operation 13 allowed for us to explore the dynamic activities of the site's inhabitants (Prehispanic and Spanish) during separate occupations. Operation 13, along with the other excavations of the Fortín de Yo'okop during the 2014 CRAS field season, provide us with more data to explore the chronology the area, as well as the activities of the Prehispanic and Spanish people who occupied the Fortín de Yo'okop.

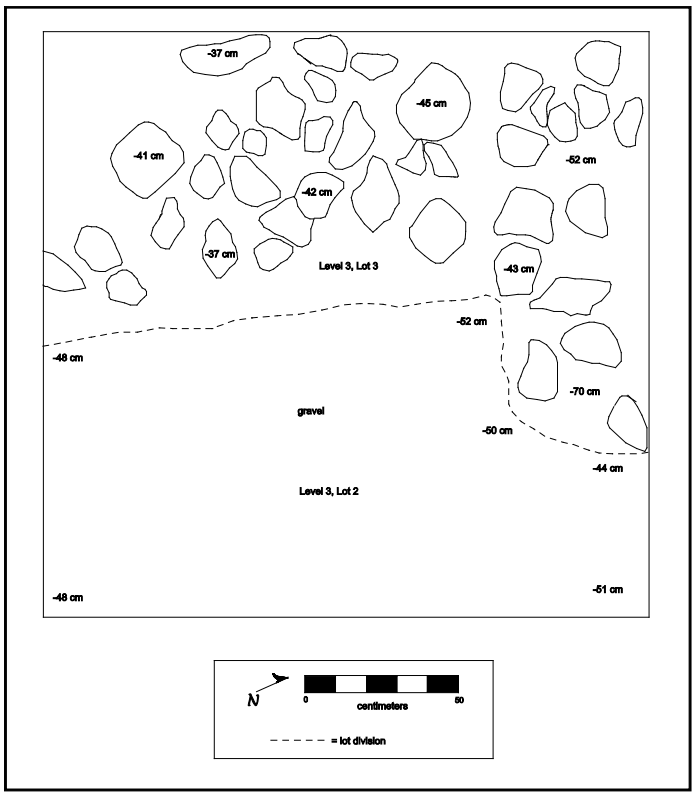


Figure 79. Fortín de Yo'okop, Operation 13, Level 3, Lots 2 and 3, Plan Map

Figure 80. Fortín de Yo'okop, Operation 13, Level 3, Lot 2

Figure 81. Fortín de Yo’okop, Operation 13, Level 3, Lot 3

Part 2: The *Ejido* of Saban

Chapter 11: Fortín de Yo'okop, Operation 14

Alejandra Badillo Sánchez

At the top of the hill, inside the Fortín de Yo'okop, Operation 14 was excavated. The location was to the northwest of a Prehispanic construction, Structure NW S1E1-1, and between two components of the nineteenth century wall (Figure 4).

The excavation of the unit began with the removal of organic material, a layer of leaves, which once removed showed the beginning of Level 1, Lot 1. This sediment had several fine roots, had a clayey texture, low compaction, was black in color (5YR 2.5/1), and contained some stones 17 to 25 cm in size that protruded above the surface. Within this level, an incomplete gray obsidian blade was located (Figure 82).

After digging 5-10 cm, the color of the soil changed to dark gray (5 YR 4/1); therefore Level 2, Lot 1 was begun. The clayey texture of the soil continued, however, several small stones or fine gravel, concentrated in the eastern sector of the excavation unit with a maximum thickness of 8 cm, were observed (Figure 83). At the end of this level, several fragments of glass bottles, in amber and aqua color, were found. These bottles date from late nineteenth and early twentieth centuries. In addition, a few fragments of pottery from the Postclassic, of the Chen Mul Modeled ceramic type, as well as other pieces from the Terminal Classic were also located. Furthermore, a few lithic fragments, including flakes and flint striker, were also collected.

Below this deposit, Level 2, Lot 2 was located. This lot was characterized by a dark gray soil (10YR 4/1) mixed with irregular gravel of 2 to 10 cm in diameter. This layer covered the whole extent of the excavation, and had a thickness of 6 to 12 cm (Figure 84). However, it is noteworthy that this wasn't any kind of stone pavement, because no rocks were arranged to provide a surface, as is characteristic of the pavements constructed by the militia that have been located in other areas of the fort (see Chapters 5 and 12).

At the time of excavation, there was several holes between the stones, similar to the irregular surface of gravel construction fill. Therefore, it is probable that this layer was part of the fill of the last Prehispanic stage of the site or, otherwise, was part of the construction material removed from Structure S1E1-1, mixed with the material from the Prehispanic plaza, perhaps as part of the subfloor. Among the materials found in this level were several fragments of Terminal Classic pottery and an obsidian razor blade fragment.

Under the irregular gravel, fine roots and rootless continued, within a black clayey soil (7.5YR 2.5 / 1). This deposit, Level 3, Lot 1, had low compaction. It contained abundant small stones of 5-15 cm in diameter, with some up to 28 cm long, in no apparent order (Figure 85). It should be mentioned that obsidian blade fragments mixed with ceramic samples from the Early, Late, and Terminal Classic were found. With the advance of this excavation, the number of stones decreased and only soil covered the bottom part of this level, which was up to 12 cm thick.

Figure 82. Fortín de Yo’okop, Operation 14, Level 1, Lot 1

Figure 83. Fortín de Yo’okop, Operation 14, Level 2, Lot 1

Figure 84. Fortín de Yo'okop, Operation 14, Level 2, Lot 2

Figure 85. Fortín de Yo'okop, Operation 14, Level 3, Lot 1

Below this deposit, stones around 15-20 cm in size became more frequent. For that reason, Level 3, Lot 2 was created. In this level, some large and rough stones, up to 27 cm in diameter, were found. In addition, the color of the soil changed from a very dark grayish brown (10YR 3/2) to a dark brown color (10YR 3/3), and the amount of rocks considerably decreased. In total, this level had a thickness of 8 to 14 cm (Figure 86).

The next stratum (Level 4, Lot 1) was layer of very pale brown soil (10YR 8/4). It was a stucco floor that was well preserved in the northwest side, but towards the southeast area the floor became a gravel subfloor. This level corresponds to a platform and Lot 1 correspond to its surface (Figure 87). However, Level 4, Lot 2 corresponded to the exterior area of the platform, where the total height of the platform was 23 to 30 cm (Figure 88). The platform architecture consisted of an alignment of rocks 60-50 cm long, arranged in a single row, which could be seen in the southeast side of the excavation. This alignment was designated Level 4, Lot 3 (Figure 89). The platform rose from a subfloor of gravel (Level 4, Lot 5) and was adapted to the topography of the bedrock, which was located between 71 and 90 cm deep (Figures 90 and 91).

The top of this platform was consolidated in order to preserve its stability for future reference. The material employed in the consolidation was a mixture of lime and sascab (Figure 92).

Once the architecture found was properly registered, we proceeded with the backfilling of the unit, re-integrating all sediment and stones that were previously extracted. The structure was initially covered with a layer of soil to ensure its preservation (Figures 93 and 94).

Interpretation

As a result of this excavation and the analysis of the materials located in this unit, it is possible to establish that the earliest occupation in this area dates from Early Classic period (Figure 89). During this time a circular platform was constructed upon the rough terrain of bedrock, and then leveled with a gravel-layer to obtain a surface of occupation (Figure 91). The architecture of the circular structure or platform was originally composed of a stucco floor surface, which was well preservation in the northwest corner while in other areas only a gravel subfloor was located.

Years later, with the development of the site, this platform fell into disuse and during the Terminal Classic it was covered with a layer of soil and rocks in order to construct a larger platform or a terrace. Then, another construction phase was initiated, in which two very fine gravel surfaces were laid down during the Early Postclassic, both associated with the final construction of Structure S1E1-1.

Hundreds of years later, over this occupational surface, the Mexican federal militia arrived in the area and constructed the Fortín de Yo'okop during the mid-nineteenth century, modifying and reusing elements from the previous occupations.

After 1911 the area was abandoned and the site was covered by vegetation, which generated an organic layer that was the first material excavated in the unit.

Figure 86. Fortín de Yo’okop, Operation 14, Level 3, Lot 2

Figure 87. Fortín de Yo’okop, Operation 14, Level 4, Lots 1 and 2

Figure 88. Fortín de Yo'okop, Operation 14, Level 4, Lot 2

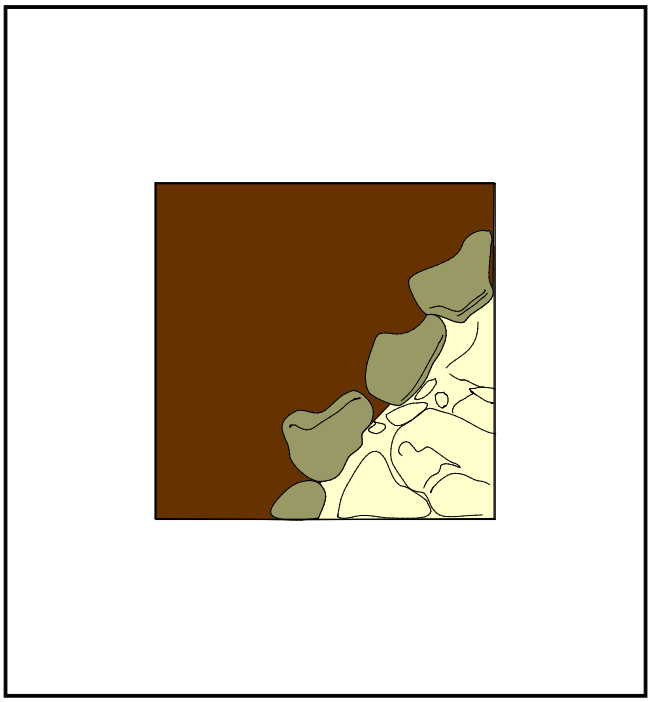


Figure 89. Fortín de Yo'okop, Operation 14, Level 4, Plan

Figure 90. Fortín de Yo'okop, Operation 14, Level 4, Lots 3 and 5

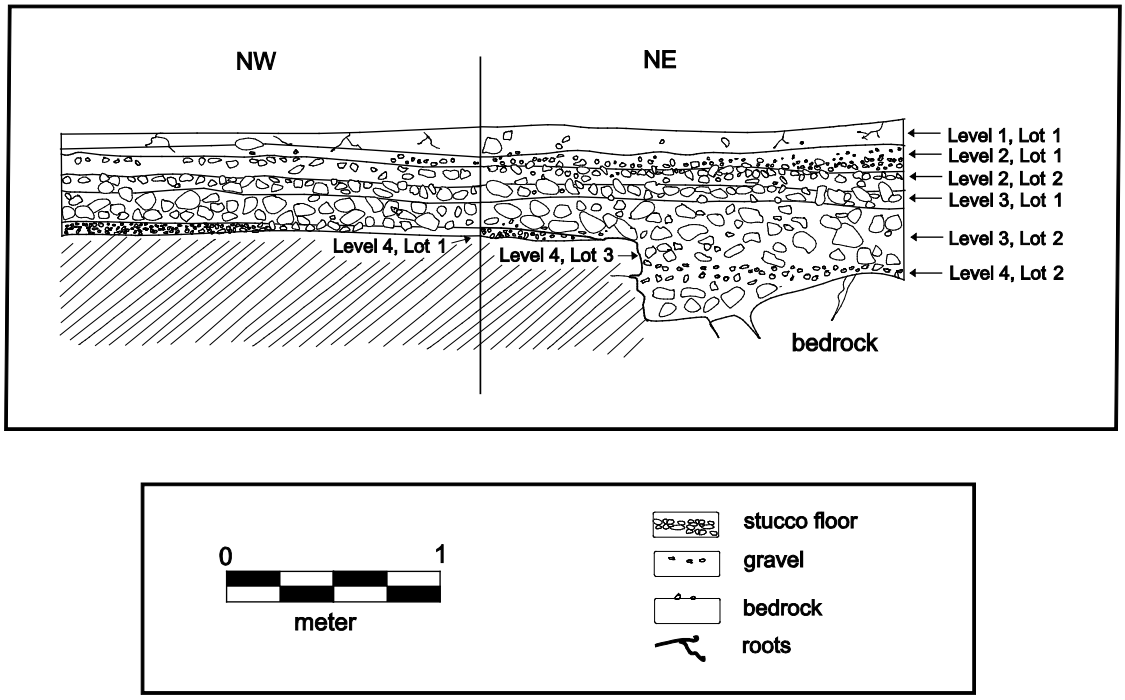


Figure 91. Fortín de Yo'okop, Operation 14, Profiles

Figure 92. Fortín de Yo'okop, Operation 14, Consolidation

Figure 93. Fortín de Yo'okop, Operation 14, Backfilling Process

Figure 94. Fortín de Yo’okop, Operation 14, Backfilled

Part 2: The *Ejido* of Saban

Chapter 12: Fortín de Yo'okop, Operation 15

Alejandra Badillo Sánchez

Operation 15 was located to the east of Structure N1W1-1, at the top of the elevations south of the fort and within the fort of the hill (Figure 4). This operation was planned to define the construction system of both the Prehispanic remains and the nineteenth century fortification, as well as to explore the activities that were conducted in the area. In addition, this excavation was planned to obtain a date for the Prehispanic and historical occupations.

The excavation began removing the layer of fallen leaves and organic matter from the surface, which revealed irregular topography (Figure 95). Level 1, Lot 1 began with silty, clayey sediment, with low compaction that was very dark gray in color (5 YR 3/1), which also contained very fine roots and rootlets. In addition, this level had several irregular stones 3-7 cm long and only one that was 20-25 cm in size, located on the southeast side of the excavation unit. It is noteworthy that the top of an amber glass beer bottle was found. The base of this bottle showed marks of its production style; it was manufactured by techniques including blowing and hand modeled (Figure 96).

This level reached 12 cm deep in some areas, while in others it was only 7 cm thick. Below lay a layer of irregular stones that covered the whole unit. The rocks were 5 to 20 cm long, and formed a pavement (Figure 97). The soil mixed between the stones was very dark gray (10YR 3/1). This deposit was named Level 2, Lot 1 (Figure 98).

At the center of the unit, the stone pavement included an alignment that runs from southwest to northeast, which sloped down to the east. It did not present any obvious drain feature, like the one observed in Operation 4 (Shaw 2012: 66). (Figures 98-101).

This pavement was not excavated because it is an architectural feature and we didn't had permission to remove this type of architecture. Therefore, the excavation of the test pit ended a few centimeters below the surface.

It is noteworthy that in Level 1, Lot 1 several ceramic samples were found, which date to the Late Formative and Terminal Classic.

Interpretation

In this part of the fortification, ceramics from Late Formative to Early Formative were located. These have often been observed in other units at this site; however, their frequency is small. Nevertheless, the presence of this material mark important phases in the formation of the ancient Prehispanic site, and perhaps include the date of the first period of occupation, but more excavation would be necessary to precisely define the dynamics of formation of the ancient settlement.

On the other hand, the result of this excavation shows that the nineteenth century military engineers built a paved surface over the later prehistoric occupation, which dates from the Terminal Classic period, re-using and modifying several archaeological remains of that period.

Figure 95. Fortín de Yo’okop, Operation 15, Surface

Figure 96. Fortín de Yo’okop, Operation 15, Level 1, Lot 1

Figure 97. Fortín de Yo’okop, Operation 15, Pavement

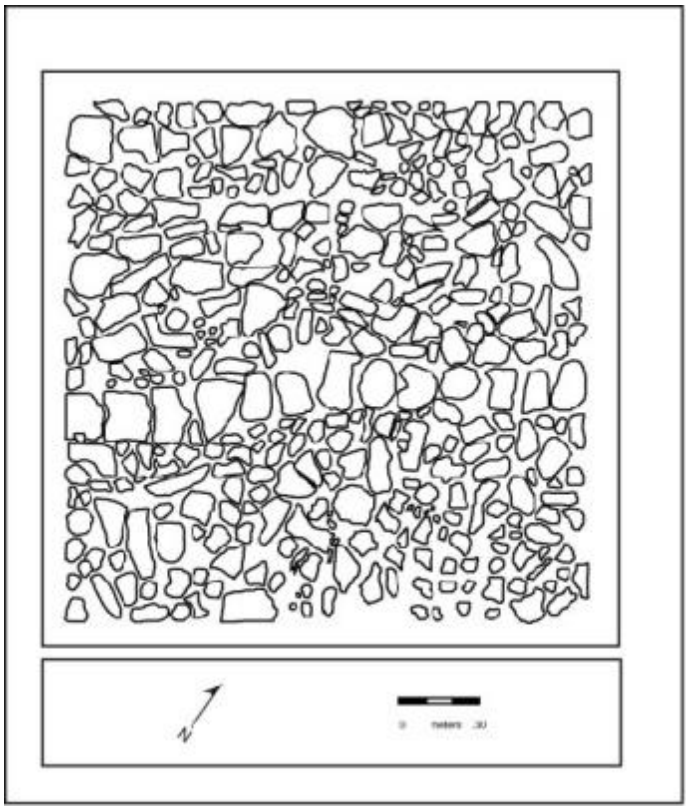


Figure 98. Fortín de Yo’okop, Operation 15, Plan of Pavement

Figure 99. Fortín de Yo'okop, Operation 15, Level 2, Lot 1

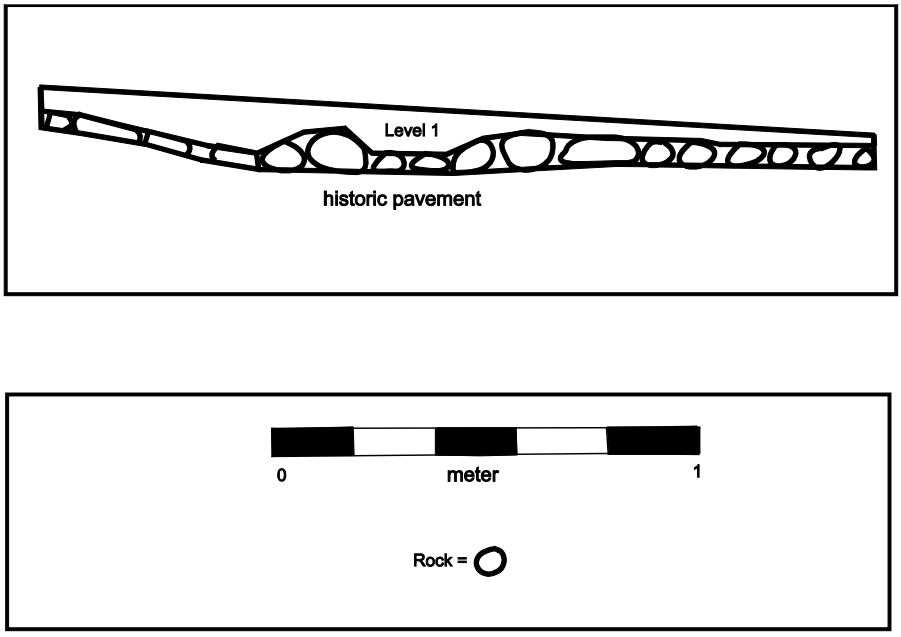


Figure 100. Fortín de Yo'okop, Operation 15, Northeast Profile

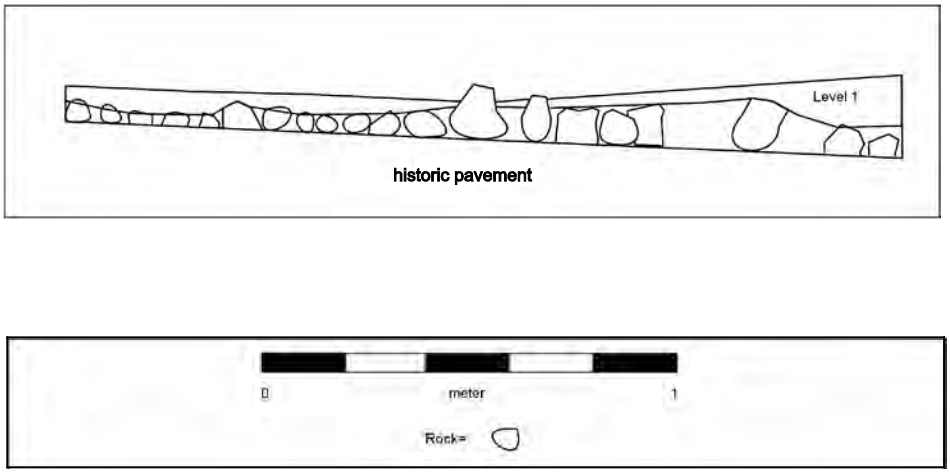


Figure 101. Fortín de Yo'okop, Operation 15, Southwest Profile

Part 2: The *Ejido* of Saban

Chapter 13: Gruta de Alux, Operation 3

Alberto G. Flores Colin, Justine M. Shaw and Karleen Ronsairo

As part of the survey program of the CRAS Project, this season was decided to conduct investigations in several architectural elements that possibly are diagnostic of a specific period, in order to obtain a better understanding about the chronology and occupational history of the region. One of these diagnostic elements are the circular foundation braces, which have been extensively documented in the region and have been considered as a Postclassic buildings (*e.g.* Harrison 1979:196) (Figure 102).

However, this temporary assignment turns out to be quite problematic, because this type of foundation is still used at present as the base for different types of perishable structures that are part of the repertoire of vernacular architecture used by the peninsular Maya (Ramirez 2002: 167-188; Sánchez 2006: 93-98). In addition, we have conducted excavations in 2008 in this type of elements suggesting a Terminal Classic date, instead of the Postclassic.

Besides the above, one of the motivations for digging these elements is related to their potential function. Yucatec Maya call this type of foundation as *tzol tunich*, a term that means "lined stones" (Sánchez 2006: 92). Its function is to provide a firm foundation for walls made of sticks and are sometimes coated with earth and/or stucco, a construction style known as *bajareque*. This type of construction can be square, rectangular, and circular, besides having different sizes which can be associated with different functions (Ramirez 2002: 167-188; Sánchez 2006: 93-98).

In order to determine the chronology and the possible role of this type of construction, it was decided this season to concentrate excavation work in various foundations of perishable structures in the *ejidos* of Saban and Sacalaca (see Chapters 29 and 31). Because of their circular shape and size, the foundations of perishable structure that have been selected to be excavated this season may have served as bedrooms, granaries, corrals, or some other function to be determined.

One of the sites that has been registered that has this type of architecture is the site of Gruta de Alux. This settlement is almost entirely composed of circular structures, and a set of features that show the classic arrangement of a ball court (Figure 103). This assembly is formed by two elongated and parallel structures that form the laterals, along with other two smaller structures located at the ends and center of the space limited by the parallel structures, which are referred as the *cabeceras*. The space created in between these four buildings is the area corresponding to the ballcourt.

As already mentioned, during the 2010 season we had excavated two test units inside this kind of building, Operations 1 and 2 (Flores 2010b). The results of these studies suggest the possibility that, contrary to what has been argued, this kind of circular building belongs to the Terminal Classic, albeit at a Post-monumental phase.

With the aim of testing this previous result, along with the reasons stated above, it was decided to perform the extensive excavation of one of the perishable circular

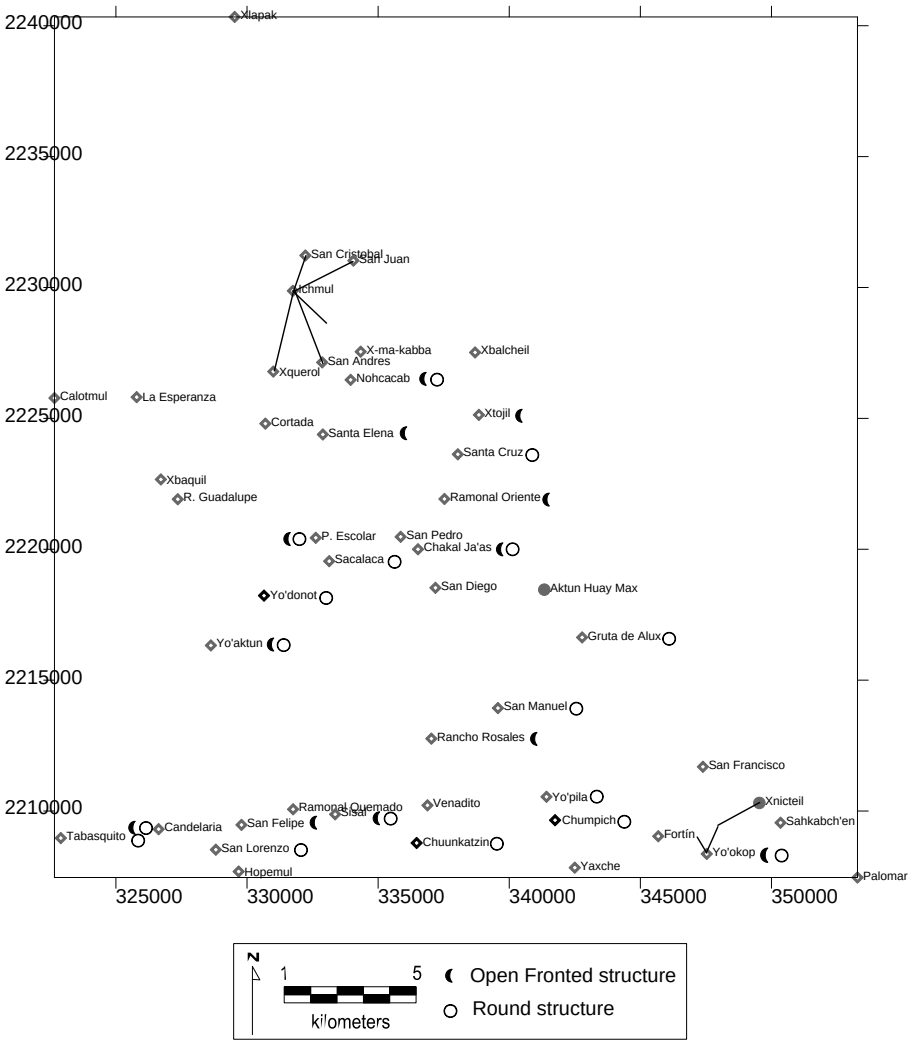


Figure 102. Distribution of Sites with Round Structures

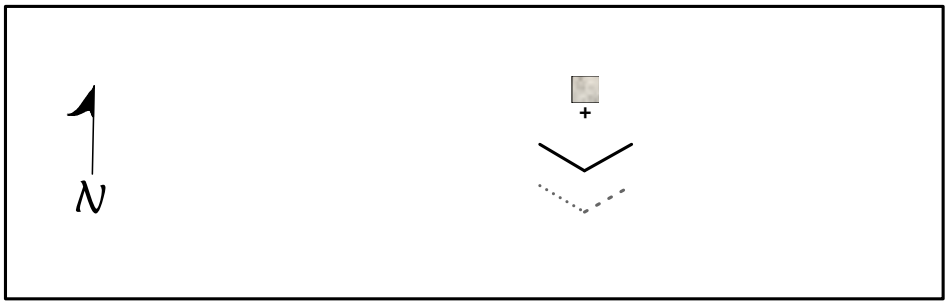


Figure 103. The Site of Gruta de Alux

foundations, Structure S1W1-4 (Figure 103). In addition to determining the chronology and the possible use of the structure itself, this excavation was designed to investigate the spatial and temporal relationship with its closer structure, in this case the southeast side of the ballcourt (Structure S1W1-7).

Excavation

The excavation of Structure S1W1-4 was an extensive excavation named Operation 3, which covered an area of 66.56 sq m, with dimensions of 10.4 by 6.4 m. This extension included not only Structure S1W1-4, but also adjacent areas to the west and south, in order to reach the nearest structures. To the west, the excavation was extended until Structure S1W1-7, which forms part of the assembly of the ballcourt, while to the south the unit went to a few centimeters before Structure S1W1-5, which is another circular structure.

Prior to the excavation work, the surface area was cleaned of vegetation, because in the area was a dense secondary vegetation that had grown for about six years, since the time that the site was mapped.

Due to its extent, Operation 3 was divided into 10 suboperations (Figure 104), which were divided in order to have better control of the excavation. These suboperations were laid out according to the same characteristics and dimensions as Structure S1W1-4; in addition that was divided in three areas in order to separate potential areas of activity. Thus, suboperations 3a, 3b, 3c and 3d correspond to those within the circular construction, while the subunits 3e, 3f, 3g and 3h were located outside.

The other two suboperations, units 3i and 3j, were placed south of Structure S1W1-4, right in the area in between it and Structure S1W1-5 (Figure 105). It is noteworthy that the latter section had a strong potential to contain a context that might give hints about the activities that were conducted in both buildings, because along with the location, in this area a large *pila* or *metate* was located, suggesting the possibility of locating a domestic context (Figure 106).

The excavation of Operation 3 was carried out following the general methodology of CRAS Project, although, unlike a vertical excavation, it was only planned to excavate up to the layer that corresponds with the construction and occupation of Structure S1W1-4 level. Next, all tasks performed in each of the suboperations will be described.

Suboperations 3a-3d (interior of Structure S1W1-4)

These suboperations are within the circular structure which is our research object, Structure S1W1-4. In these units, the first level was excavated, Level 1, Lot 1, which had a depth of about 7-15 cm on average and consisted of a dark reddish brown sediment (2.5YR 3/4), mixed with small stones (Figure 107).

Additionally, but mainly in Suboperations 3c and 3d, there were several medium-sized stones coming from the collapse of the Structure S1W1-4, evidence which suggests that this foundation had at least two rows of stones in its walls. The

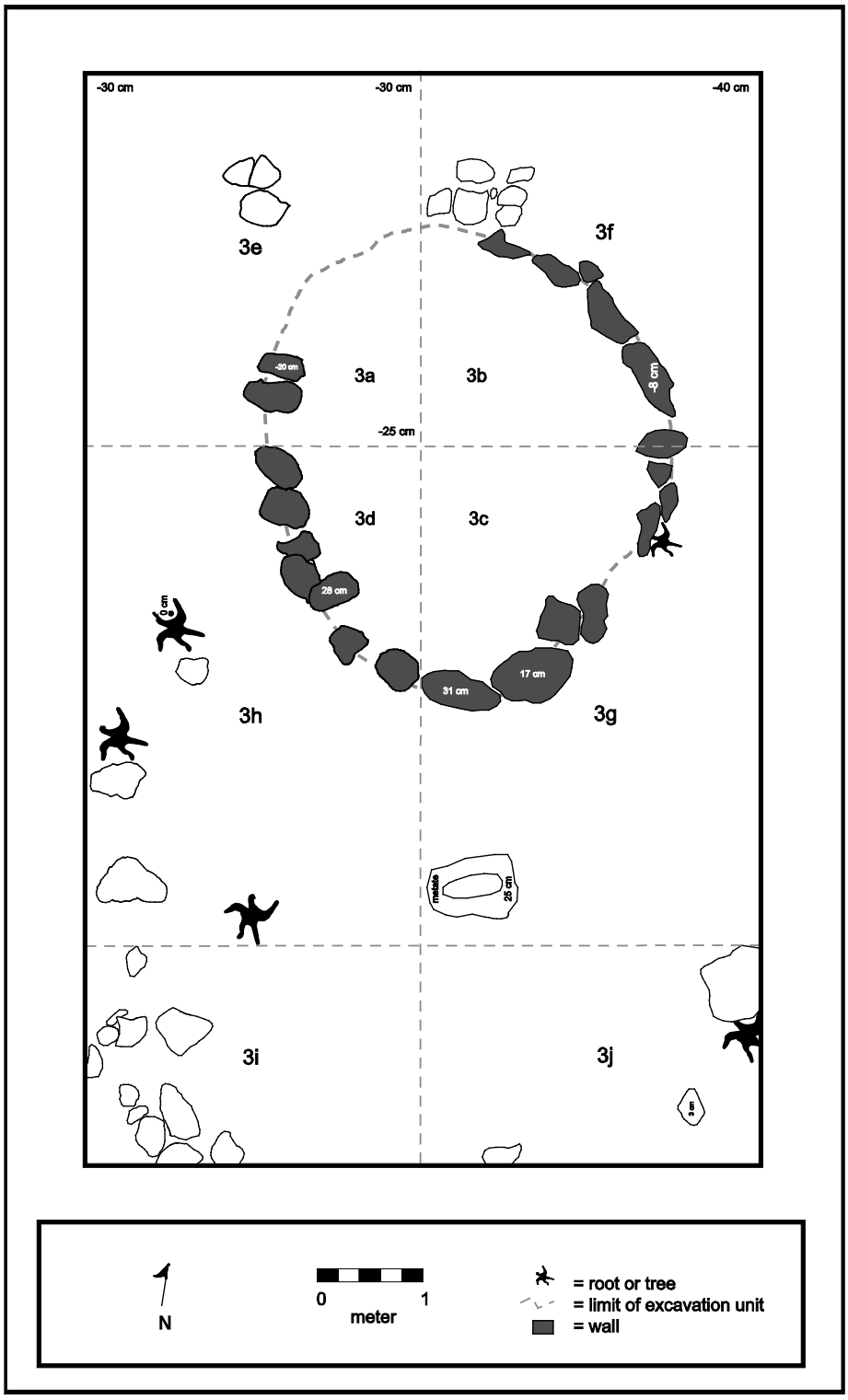


Figure 104. Gruta de Alux, Operation 3, Plan Map of Surface

Figure 105. Gruta de Alux, Operation 3, Surface

Figure 106. Gruta de Alux, Operation 3, Pila

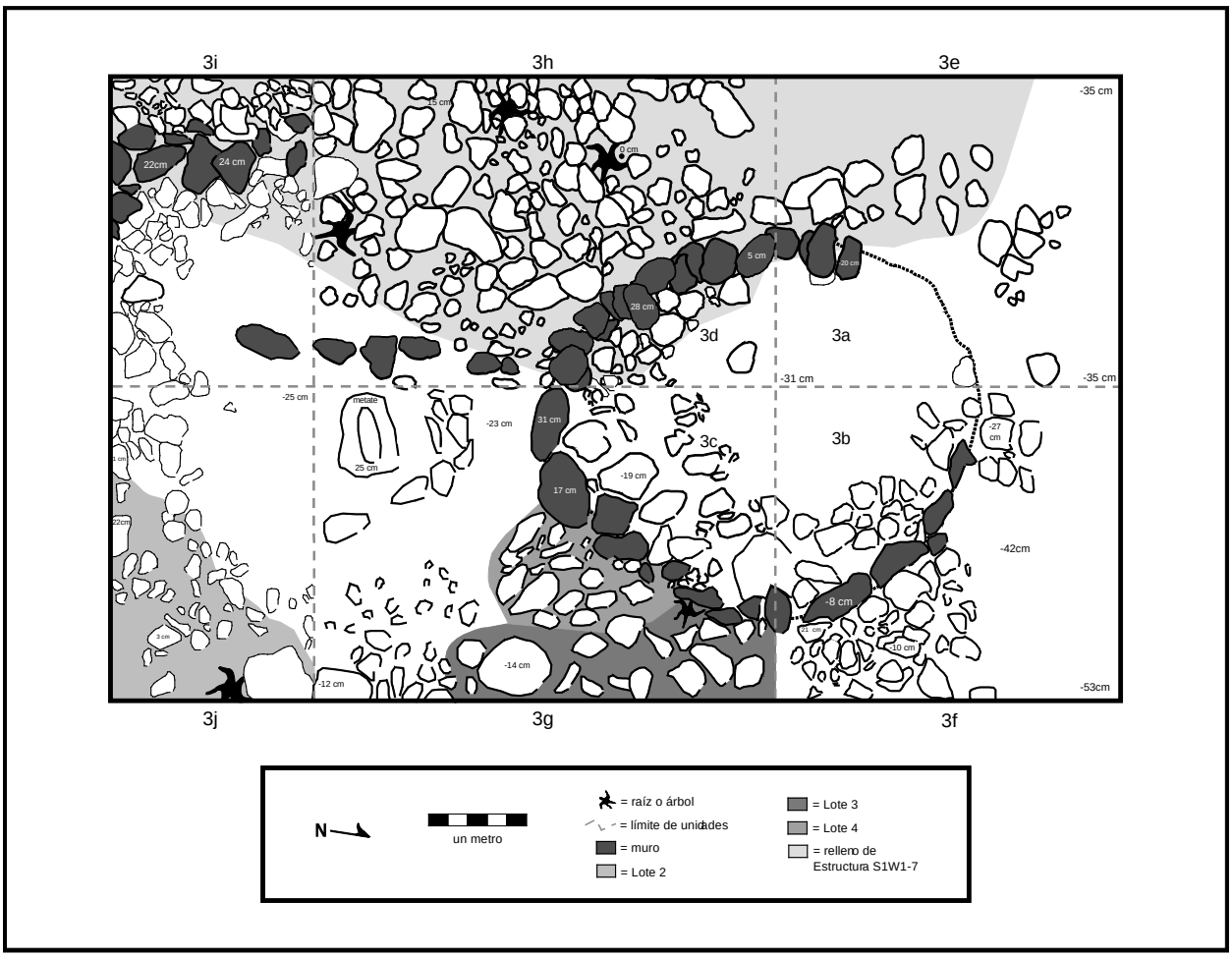


Figure 107. Gruta de Alux, Operation 3, Plan Map, Level 1

excavation of Suboperations 3a to 3d ended when the level of construction of Structure S1W1-4 was located, which was indicated by the base of the stones. Ceramics recovered from Level 1, Lot 1 belonged to the Terminal Classic, as evidenced by the presence of the types Yokat Striated var. Yokat, Muna Slate, and Akil Impressed.

In addition to the excavation of the first level, in order to understand the stratigraphic relationship of Structure S1W1-4 with the other buildings in the area, it was decided to continue the excavation of a second level but only in the third unit, which was designated as Level 2, Lot 1. This level reached an average depth of 15 cm below the surface and ended when a series of irregular stones (about 7 x 12 cm on average) covering the entire unit was reached. This layer of stones was cleaned and recorded in detail (Figure 108).

Once this excavation was completed, we realized that this layer of pebbles was actually the top of the building fill of Structure S1W1-7, the east side of the ballcourt. This finding revealed that the foundations of the circular structure (Structure S1W1-4) were placed directly on the core of the previous constructions, without any preparation as a floor. Ceramics discovered at this level belonged to the Terminal Classic.

A section of the core of the Structure S1W1-7, the east side of the ballcourt, was also exposed in Suboperation 3a; it was at the same slope as the core of the structure and there was a difference of about 20 cm between the level of Subunit 3a in regard to the one of the Suboperation 3d.

Suboperations 3d-3h (exterior of Structure S1W1-4)

Suboperations 3e, 3f, 3g and 3h were located on the outside of Structure S1W1-4, and their goal was to explore the immediate surroundings of this small building. Level 1, Lot 1 was excavated to the level of occupation of the circular structure in all these units; however, each of these units presented several particularities which will be described below.

Suboperations 3e and 3h were located to the west side of Structure S1W1-4, *i.e.* in the area near the eastern side of the ballcourt (Structure S1W1-7). The excavation of these units was brief, as they only descended 2-7 cm on average. The sediment in this layer was of a very dark reddish brown color (5 YR 2.5 / 2), mixed with a few very small stones (3-7 cm on average).

Throughout Suboperation 3h, as well as in a third of the southern part of the Suboperation 3, a series of irregular stones (about 20 x 30 cm on average) were discovered that were at the same depth, although they had a slight slope towards the northern part of the Suboperation 3A. These stones were part of the core that formed this side of the ballcourt (Structure S1W1-7), which, as was already mentioned, was also exposed in units 3a and 3d.

This context confirms that the foundation of the perishable structure (Structure S1W1-4) was built directly on the core of the former structure without any prior preparation. Besides this, in various parts of these two units some stones from the collapse of both buildings were located, both from the perishable foundation brace (Structure S1W1-4) and the side structure of the ballcourt (Structure S1W1-7). Ceramics located in these units were mainly the types of Yokat Striated and Muna Slate from the Terminal Classic.

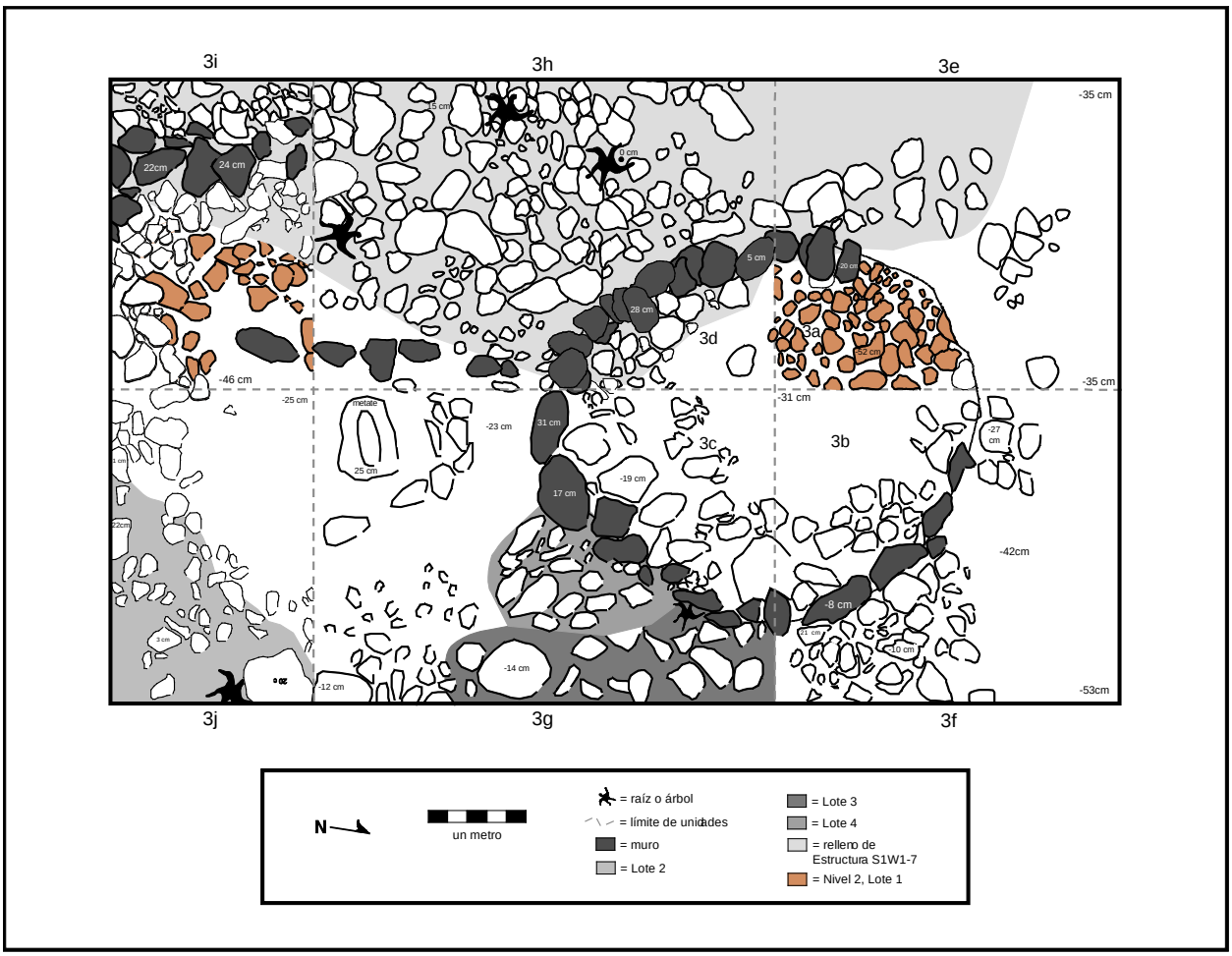


Figure 108. Gruta de Alux, Operation 3, Plan Map, Level 2

Suboperations 3f and 3g were located in the eastern half of the exterior of Structure S1W1-4. Suboperation 3f was excavated for only a few centimeters, because the occupation level associated with the foundation of the perishable structure was very close to the surface. The color of the soil of this layer was reddish-brown (2.5 YR 3/3), and it was mixed with a few small stones (about 3 x 5 cm on average).

On the other hand, Suboperation 3g was one of the most interesting of the entire Operation 3, both because of the elements on the surface as well as those that were found during the excavation (Figure 109).

This unit, along with the southern part of Suboperations 3h, 3j, and 3i, form a domestic activity area located between Structures S1W1-4 and S1W1-5. In this zone, just near the center (in the southwest corner Suboperation 3g) a *metate*, known locally as a "*pila*" (Figure 106) was located. The presence of this element suggested that the area may have been used as a patio, or a common area for food preparation, among other possible activities.

In Suboperation 3g only one level (Level 1) was excavated; however, because to differences in soil color and arrangement of stones, it was divided into four parts (Figure 108). Level 1, Lot 1 was located in the west and east-central of the unit and it consisted of a brownish color sediment. Ceramics from this Lot 1 were from the Terminal Classic, as evidenced by the types Tekit Incised and Muna Slate. Due to the discovery of blackish sediment, it was decided to change to a different lot.

Level 1, Lot 2 was located south of Suboperation 3g and it consisted of a dark reddish brown sediment, mixed with several pebbles. The average depth of this layer was 5 cm. This was the area where the *metate* or "*pila*" was located; therefore, it was expected that in this zone there were other elements that could indicate the types of activities that were carried out in this context. Ceramics recovered from Level 1, Lot 2 also belong to the Terminal Classic, as is exemplified by the presence of sherds of Yokat Striated var. Yokat and Muna Slate.

During the excavation of the northeast side of the unit, soil with a black color and a high concentration of ceramic sherds was found. For this reason, it was decided to establish a new lot, Level 1, Lot 3. The average depth of this lot was 6 cm and it should be highlighted that an unusually large total of ceramic sherds were found, which were placed randomly without any particular arrangement. Most of the recovered sherds from Level 1, Lot 3 belonged to the Terminal Classic, exemplified by fragments of Yokat Striated var. Yokat, Muna Slate, and Red Teabo.

In order to get a better control of the contexts and the remains recovered in this unit, it was decided to create a new lot, Level 1, Lot 4, which was located on the outside of the wall of Structure S1W1-4 and Lot 3, just where a concentration of stones that could be part of the collapse of such construction existed.

Level 1, Lot 4 had an average depth of 10 cm and consisted of irregular stones of various sizes (about 20x30 to 40x70 cm on average), some of which came from the collapse, while others were *in situ*. These stones were exposed and cleaned to their bases in order to properly register them (Figure 110). Sediment within Level 1, Lot 4 was black in color, and was located in the junction of the rocks

Figure 109. Gruta de Alux, Operation 3g, Surface

Figure 110. Gruta de Alux, Operation 3g, Level 1, Lots 2-4

described above. The only ceramic fragment recovered from Level 1, Lot 4 belonged to Yokat Striated var. Yokat from the Terminal Classic.

Suboperations 3i-3j (south of Structure S1W1-4)

Suboperations 3i and 3j were the units that were located further to the south of the excavated area, in which it was speculated that there could have been a courtyard, and just north of the wall of Structure S1W1-5, which was not affected by our excavations. In the unit 3j, excavation continued until the level of the occupation surface indicated by the *metate* or "*pila*" located on the unit 3g, which was just north of this unit. This level was designated as Level 1, had an average depth of 4-10 cm, and was divided into two lots.

Level 1, Lot 1 consisted of a dark reddish brown sediment (5YR 2.5 / 2), while Level 1, Lot 2, corresponding to the eastern part of the unit, consisted of a blackish layer, very similar to that observed in Lots 2 and 3 of Suboperation 3g (Figure 107). Ceramics recovered in both lots belonged mainly to the types Yokat Striated var. Yokat and Muna Slate from the Terminal Classic, although three Postclassic sherds of Chen Mul Modeled were found.

Suboperation 3i was located in the southwestern part of the excavated area in Operation 3. Due to the presence of traces of Structure S1W1-7 (the east side of the ballcourt), the western third of the unit was not excavated. The surface of this unit had a slope which descended to the southeast, with a difference of 6cm between each corner.

Suboperation 3i, Level 1, Lot 1 consisted of a dark reddish-brown sediment (5YR 2.5 /2), which had been disturbed by various roots and numerous tunnels of rodents that crossed the eastern part of the excavation. Once the sediment was removed, a well-cut stone was exposed, which seemed to be part of the base of a substructure, probably a platform that would have been below an adjacent structure (to the south), Structure S1W1-5.

Although this well-cut stone was aligned with at least two other stones forming a possible wall, this was the only example of this type of stone throughout the unit, which suggests that this feature came from an earlier structure. Based on its depth and more formal construction, this substructure appears to be associated with the superstructure that preceded the circular foundation brace (Structure S1W1-5), because its construction style was very different.

Excavation of this unit also exposed rocks coming from the collapse of Structure S1W1-5 (to the south) and Structure S1W1-7 (to the west). This collapse was formed by medium-sized stones, of about 15 x 30 cm, whose shape was irregular and it was lacking gravel or small stones. In this area no well-cut stones were located. The sediment between these stones had a dark reddish color (10R 3/6), which became more intense at 30 cm below the surface. At this level very little pottery was found; those examples that were identified date from the Terminal Classic.

In order to know the chronology associated with Structure S1W1-4, it was decided to continue the excavation of this unit below the level of occupation of the circular foundation brace. During this process a new sediment was discovered at 38cm below surface, but only in the eastern part of the unit. This deposit was appointed as Level 2, Lot 1 and it consisted of a layer of dark red soil (5R 3/2) that had a high amount of gravel or *chich*, which was a context of an area of occupation. In this deposit several ceramic sherds were collected, which were much better preserved; most belonged to the Terminal Classic. Some of these ceramics lay horizontally on the surface, indicating that this level was not disturbed by the rodents or other environmental factors as the previous level had been.

Because the goal of this excavation was to explore the phase of occupation associated

with Structure S1W1-4, it was decided to conclude the excavation at this level in order to not affect and confuse contexts (Figure 111). However, this evidence shows that the area was used prior to the construction of both circular structures (Structures S1W1-4 and S1W1-5), perhaps by the builders of the platform that had the well-cut stones. All exposed rocks from the collapse were left in their original positions to be registered with the other units of the Operation 3 (Figures 107 and 112).

Another element to highlight is a possible wall that was found to the southeast of Suboperation 3h, which extended to the unit 3j. This wall seems to have been an architectural element of Structure S1W1-7, possibly the outer wall of the base or a containment wall of a construction box. Because the excavation could not be continued without affecting the core fill of the adjacent structure, it was not possible to fully discern the nature of this wall, which was left *in situ* for further consolidation.

Once the entire area of the ten units was totally exposed, and after carrying out the appropriate registration, with photographs and plan maps (Figures 108 and 111), we began to conduct the task of consolidation.

Consolidation

This process of consolidation took place in the architectural elements that were exposed during excavation work; all this was done in order to ensure its preservation and reduce the effects caused by the archaeological intervention.

The consolidation process included the removal of the sediment existing in the joints or interstices between the rocks; therefore the first step was to clean the elements to be consolidated. Following this, a mixture of new material was applied (previously prepared in small amounts), which was highlighted later with a sort of paint made with red soil or *chak lu'um*. The mixture used for this purpose was composed only of lime and *sascab*.

This consolidation focused on the stones that were part of the foundation of the perishable structure (Structure S1W1-4), as well as other features that were *in situ*, such as the *metate* (in Suboperation 3g) and sections of walls located in Suboperations 3h and 3i (Figure 113). Because Structure S1W1-4 was placed directly on the core of Structure S1W1-7, it was decided to consolidate part of said core fill in order to ensure its stability. This consolidation of the exposed core was conducted in areas where

Figure 111. Gruta de Alux, Operation 3i and 3j, End of Excavation

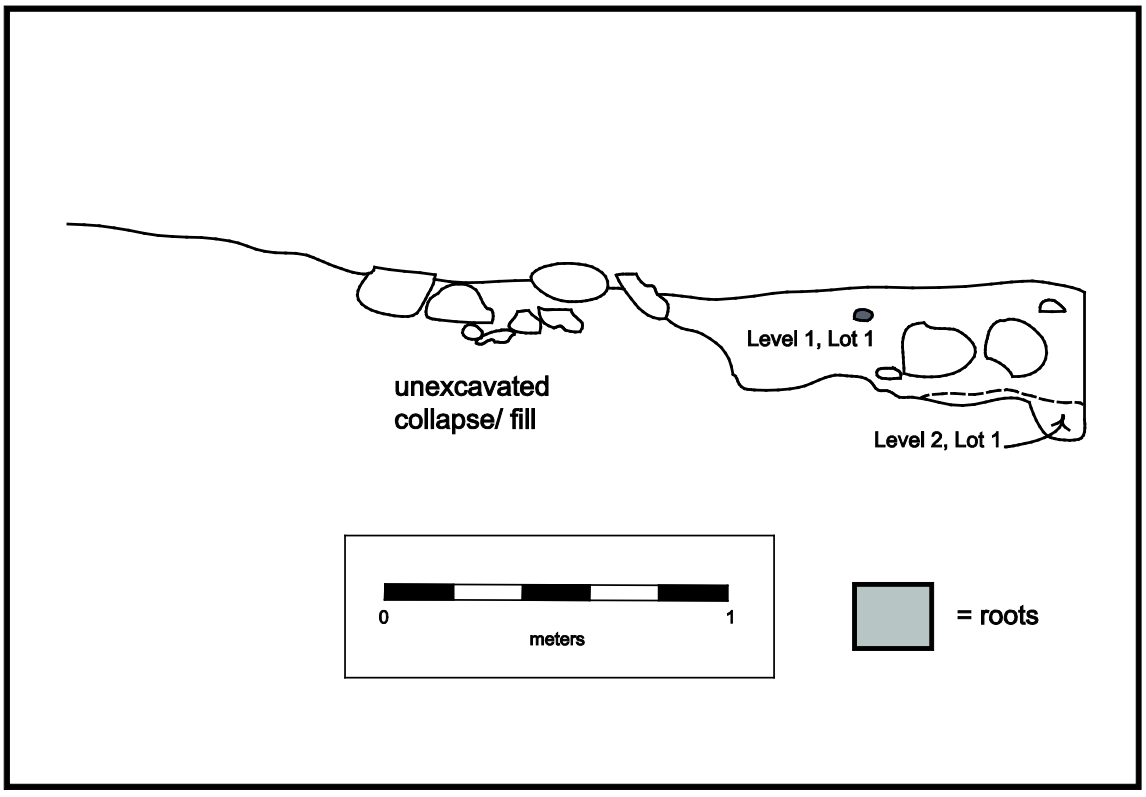


Figure 112. Gruta de Alux, Operation 3i, North Profile

Figure 113. Gruta de Alux, Operation 3, Cleaning Process to Consolidate

Structure S1W1-7 was visible or had been exposed by our excavation, an area that corresponds with Suboperations 3a, 3d and 3h.

In addition, we must emphasize that no stone was restored to its original state, but all the elements were consolidated as they were found. Apart from that, we had no permission to conduct any restitution of features; the consolidation that we have conducted allowed the preservation of evidence so that, in the future, these buildings could be restored and consolidated with the same elements that were originally constructed (Figure 114).

Once these consolidation tasks were completed, we proceeded with the backfilling of the unit with the same sediment extracted from it, thus concluding the excavation process (Figure 115).

Interpretation

The excavation of Structure S1W1-4 has allowed us to test the hypothesis that we raised about these types of structures not belonging to the Postclassic, as was previously thought (*e.g.* Harrison 1979: 196). While we could not locate any sealed context within this excavation, with which we could have more accurate samples, ceramics associated with this construction indicates that these foundations braces are from the Terminal Classic. This is based on the fact that most of the sherds are from this period; just 3 Chen Mul Modeled sherds were found in all suboperations of Operation 3 (see Chapters 41 and 43).

In addition to ceramic evidence, one of the most interesting data retrieved from the excavation of Structure S1W1-4 is its position and its stratigraphic association with Structure S1W1-7, one of the sides of the ballcourt. This excavation revealed that the foundations brace (Structure S1W1-4) was placed directly over Structure S1W1-7 without any prior preparation. No floor or *sascab* were placed; indeed, the builders were not even concerned about leveling the ground. As a result, there was a slope (from west to east) in the floor inside Structure S1W1-4. This evidence suggests that the builders, for some reason, did not devote great efforts and/ or they not have enough resources for the preparation of a flattened surface. This slope may be related to the function of the structure, which perhaps was not permanently used, but may have been seasonal in nature.

Furthermore, the fact that the Structure S1W1-4 was placed directly on the exposed core of Structure S1W1-7 suggests that the ballcourt was abandoned and/ or not maintained, *i.e.*, the coating was eroded during the time that the circular foundations of the perishable structure were built. Another possibility is that these later builders were the same who partially dismantled Structure S1W1-7 in order to build Structures S1W1-4 and S1W1-5. If this was so, it was during this process when the surface stones were taken, destroying what remained of this construction's coating, exposing the core.

Either way, the evidence suggests that at the time when Structure S1W1-4 was built, Structure S1W1-7 was already obsolete and/ or abandoned. However, both

Figure 114. Gruta de Alux, Operation 3, Consolidated

Figure 115. Gruta de Alux, Operation 3, Backfilled

constructions belong to the Terminal Classic, although stratigraphically these date from different phases of this period.

Although the evidence recovered in the excavation of Operation 3 is insufficient to conclude what could be the specific role of this foundation brace and the perishable structure whose base it formed, we can conclude that this was not a dwelling. The dimensions of the Structure S1W1-4, just 4.20 m in diameter, reveal that the interior space is a very small area. In addition it lacks a constructed or tamped floor and has an uneven surface formed by rough stones of the exposed dry core fill. All these data refute, or at least make it unlikely that this type of buildings in this settlement would have been devoted to residential use, at least not a permanent use.

Although the results of the excavation of Operation 3 are inconclusive, it is likely that the function of this type of constructions may have been to store grain, *i.e.* its function was that of a granary. While we have no firm evidence to support this, the dimensions of the structure, the absence of a floor, the slope of its inner surface, and its position on one of the sides of the ballcourt, supports this hypothesis. A further possibility is that this construction was only been a small temporary house, a house in the cornfield, where farmers usually spend one or more nights in order to carry out their agricultural activities, although their permanent residence would have been located at another nearby site.

The presence of the *metate* or "*pila*" suggests a domestic context, although this element also may have been used only temporarily, when farmers flocked to monitor and supervise their fields. Other interesting data collected in the excavation are two lots of black soil found in Suboperations 3g (Level 1, Lot 3) and 3j (Level 1, Lot 2). While it would be necessary to undertake investigations further, the presence of this black soil may be related to food preparation and/ or an area to disposal of organic matter.

The absence of remains of charcoal in this area leads us to think that either no fires were regularly burned or that the area was constantly cleaned. Due to the proximity of these lots to the surface, this context has been quite altered, mainly through farming activities that have taken place in the area from historical and contemporary times.

In addition, the results of the excavation of Operation 3 raised, albeit indirectly, more and new questions about the occupational history of the ballcourt. If all circular structures that we found at the site of Gruta de Alux (see Figure 104) are subsequent to the ballcourt (Structures S1W1-6, S1W1-7, S1W1-8 and S2W1-1) then the obvious question is, where are the contemporary structures associated with this feature? One possible answer is that the houses associated to the ball game were destroyed in later times, or that the associated buildings had been made of perishable materials. An additional likelihood is that the ballcourt had been used only temporarily; therefore, it was not necessarily to have had associated constructions since it was built to be used only once or on a few occasions.

The excavation of Operation 3, a small and simple circular structure, has raised more new questions than we had anticipated. These questions are not only related to the function and temporary nature of this type of construction, but they also makes us think about its short-term nature and the special features that may have been associated with this ballcourt arrangement.

The research that we have conducted on the site of Gruta de Alux demonstrates that it is necessary to also turn one's gaze to small sites, even those that have very little architecture, such as this settlement. The registration and excavation of this type of small site helps us to understand important aspects of the processes of occupation and abandonment of settlements, in addition to adding information about issues that also concern the major

sites, such as the function and distribution of specialized architecture (such as circular structures and ball courts). Without a doubt, the systematic study of these small sites also help elucidate aspects of Maya life that are not so easy to observe (or are not a relevant issue) in larger sites.

Part 2: The *Ejido* of Saban

Chapter 14: San Francisco, Operation 1

Alberto G. Flores Colin and Michael Bradford

Operation 1, a 2 x 2 m test unit, was placed near the base of the west side of Structure S1E1-2 (Figure 116). The unit is located approximately 60 m east at 95 degrees from the historic well at San Francisco. The southeast corner of Operation 1 is located approximately 8 m due west of the southwest corner of a previously mapped wall on top of the northern half of Structure S1E1-2. The west side of the structure faces a small acropolis plaza. Some collapsed stone from the structure was present at the surface at the top of the test unit. Structure S1E1-2 is located approximately 12 m south of Structure N1E1-3. Operation 2 was placed on the west side of Structure N1E1-3 and approximately 30 m north of Operation 1. The main research goal of Operation 1 was to provide a better understanding of the various construction phases of the acropolis plaza near the west side Structure S1E1-2. It was also hoped that cultural material recovered from the unit, such as identifiable ceramics from sealed contexts, could provide an approximate date for construction.

Methodology of Operation 1 consisted of excavation according to cultural and natural stratigraphic levels. Excavation was conducted by trowel and hand-pick. All excavated soil was screened through ¼-inch mesh. Artifacts were bagged separately according to level, lot, and artifact type. All soil was replaced upon termination of the test pit. It was noted that the area has had at least some degree of modern disturbance as result of livestock and *milpa* farming. Some stones from the Prehispanic structures of the site have been used for the construction of *albarradas*.

The location of Operation 1 was cleared of dense vegetation and organic material before setting up the 2 x 2 m test unit. Some stones that were part of the Structure S1E1-2 collapse were present at ground surface, particularly in the northeast half of the unit (Figure 117). Loose stones were removed at the beginning of excavation of Level 1, Lot 1. Soil in the level consisted of 7.5YR 2.5/2 very dark brown loam, mottled with 7.5YR 2.5/1 black loam. Soil was of loose compaction, transitioning to friable compaction with depth. The level had an average depth of 10 cm below ground surface (cmbgs), and an average thickness of 10 cm. This was somewhat variable across the unit. Level, Lot 1 was terminated when a relatively dense and compact layer of stones was encountered across the entire unit floor. The stones were mainly cobble-sized and do not appear to be associated with collapse from the structure, which generally consisted of stones of a larger building block size. Instead, these smaller stones at the base of Lot 1 were interpreted as being part of a fill episode for a raised platform. Artifacts recovered from the level consisted of a total of 110 ceramic sherds. Identifiable ceramics belonging to the Early Classic included two Xanaba Red sherds and

Figure 116. San Francisco, Location of Test Pits

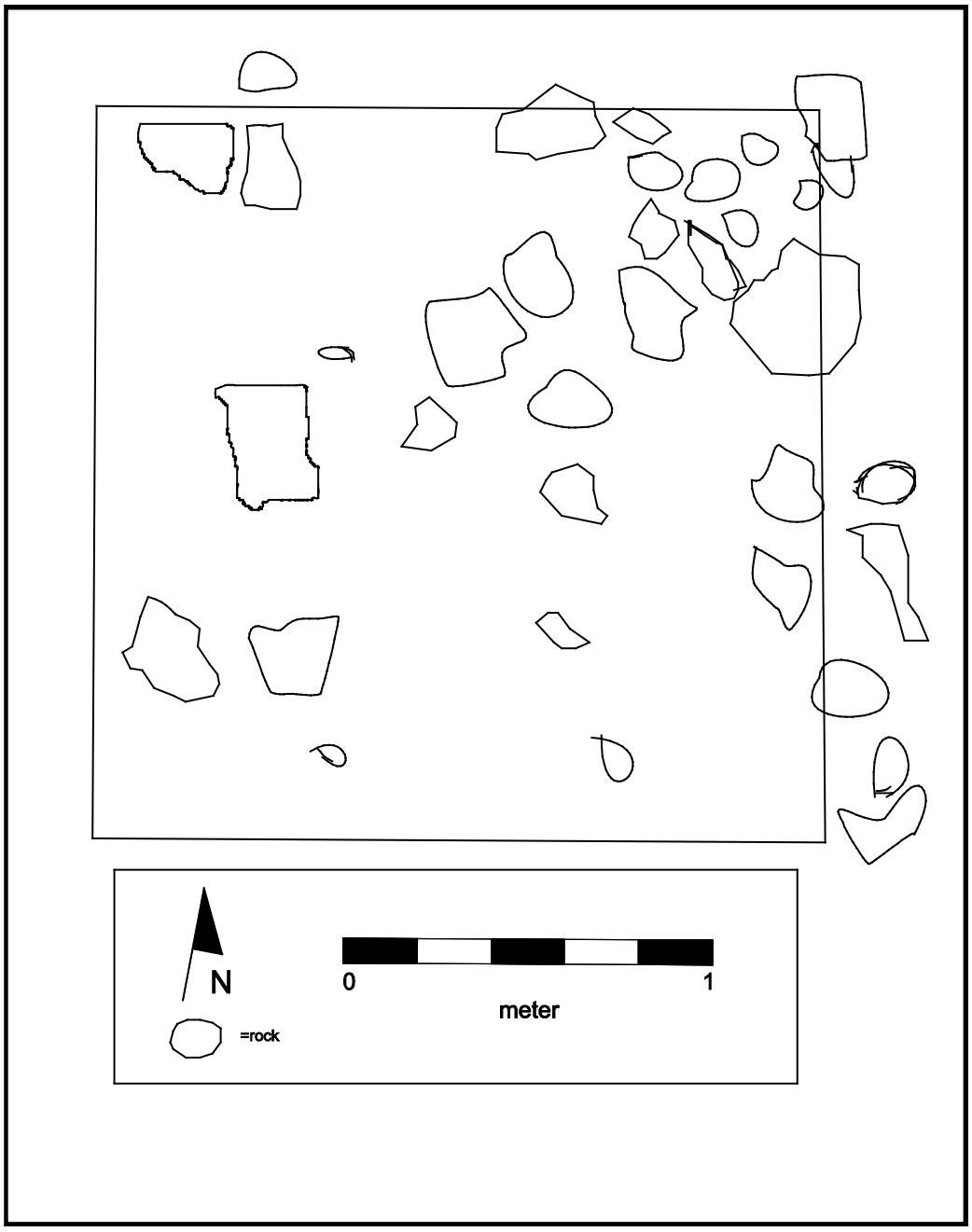


Figure 117. San Francisco, Plan of Surface Stones

one Elote Impressed sherd. Ceramics belonging to the Terminal Classic included 15 Yokat Striated var. Yokat sherds, 12 Muna Slate sherds, and two Teabo Red sherds. Identifiable ceramics belonging to the Postclassic included 54 Chen Mul Modeled sherds. The Chen Mul Modeled ceramics are fragments of an *alux* effigy *incensario* vessel or vessels that would have been used for ceremonial purposes. These fragments included a small ceramic bird that may have sat on the forehead of the effigy. Another piece of the vessel consisting of a hollow ceramic effigy arm fragment from just above the elbow to just past a decorated wrist was recovered from the ground surface at 115 cm east and 110 cm north of the NW corner of Operation 1. Based on the presence of Chen Mul Modeled ceramics, Level 1, Lot 1 is considered to date to the Postclassic Period (see Chapter 42).

Level 1, Lot 2 began at the top of a layer of stones of predominately cobble size, which was interpreted as being a fill episode, possibly for a raised platform. Excavation of the level consisted of removing the cobble fill layer. Level 1, Lot 2 was terminated when the fill layer was removed. Soil consisted of 7.5YR 2.5/2 very dark brown friable loam, transitioning to 7.5YR 3/2 dark brown friable silt loam by the base of level. Although slightly variable across the 2 x2 m unit, the level had an average thickness of 10 cm and an average depth of 20 cmbgs. Artifacts recovered from the level consisted of 40 ceramic sherds, 20 of which were identifiable. Early Classic associated sherds included one Yaxcaba, one Xanaba Red, one Caucel Trickel on Red, one Dos Arroyos Orange Polychrome, and one Elote Impressed. Ceramics belonging to the Late Classic consisted of two Arena Red sherds. Ceramic sherds belonging to the Terminal Classic included four Yokat Straiated var. Yokat, three Muna Slate, one Sacalum Black on Slate, one Tekit Incised, and one Teabo Red. The level also contained three Chen Mul Modeled ceramic effigy *incensario* fragments belonging to the Postclassic. Level 1, Lot 2 is considered to be associated with the Postclassic Period, based on the recovery of Chen Mul Modeled ceramics.

Excavation of Level 1, Lot 3 (Figure 118) was started after the cobble-sized fill was removed in Lot 2. Lot 3 also appears to be part of a fill episode, though rocks are generally smaller and the soil is slightly lighter in color than in Lot 2. Soil consisted of 7.5YR 3/2 dark brown friable silt loam, becoming mottled with patches of 7.5YR 3/3 dark brown friable silt loam with depth. Some mottling with patches of 5YR 3/3 dark reddish brown friable silt loam was present in the eastern portion of the unit by base of level. The level was terminated when relatively large rocks without form or alignment were encountered in western portion of the unit. Somewhat smaller rocks were present across the rest of the unit, though these were slightly lower in depth. It was unclear if the larger rocks represented a separate fill episode. It was also possible that the eastern portion of the unit may have been dug out. As a result, the level was terminated at this depth. The average depth of the level was 35 cmbgs, with an average thickness of 15 cm. However, this was highly variable across the unit. Ceramics recovered from Level 1, Lot 3 were not identified due to poor condition.

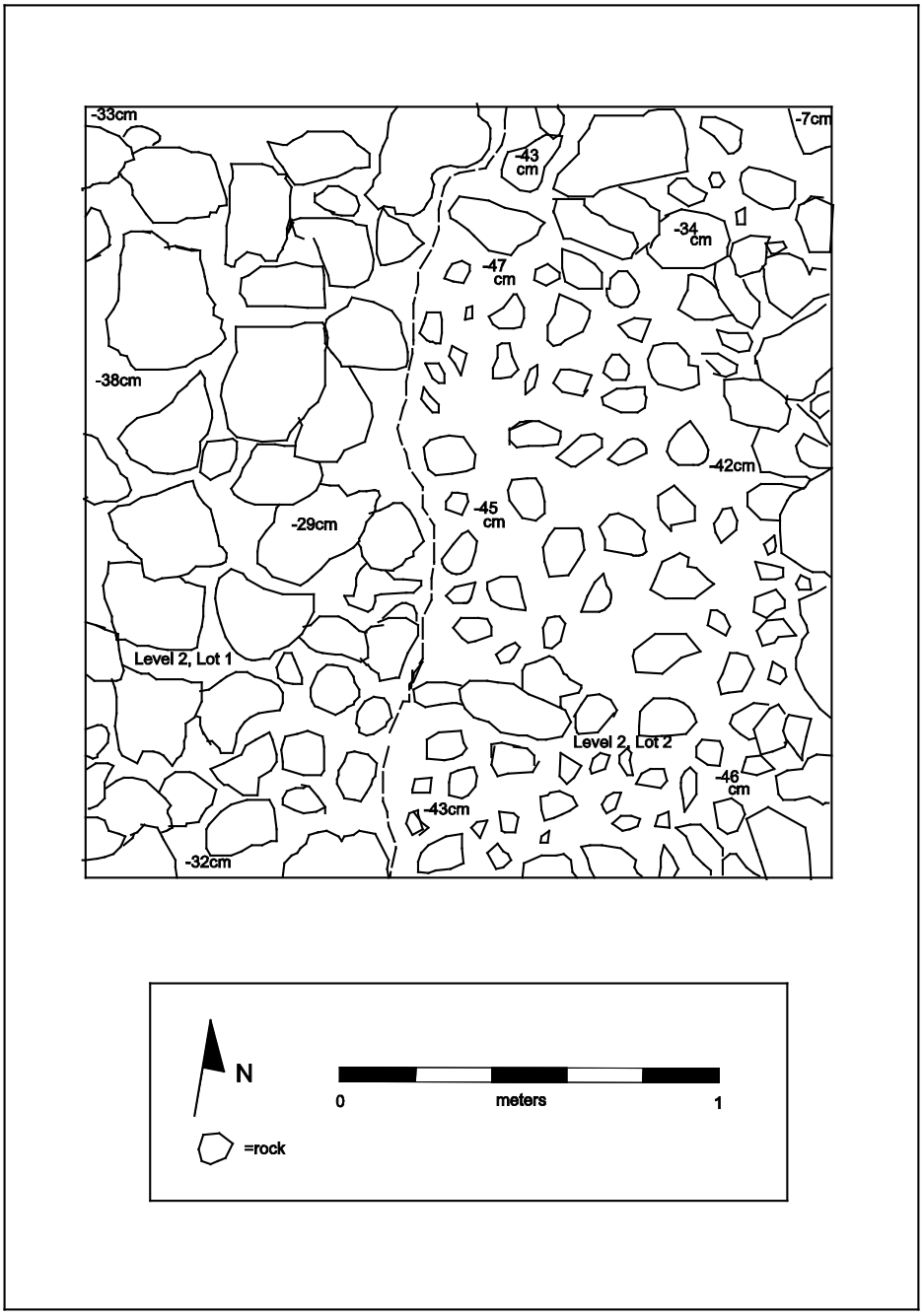


Figure 118. San Francisco, Level 1, Lot 3

Excavation of Level 2, Lot 1 was started at the base of Level 1, Lot 3, and was to consist of only the larger rocks in present in the western portion of the unit (Figure 118). Lot 1 was excavated and leveled off with the rest of the unit containing the smaller sized rocks. Smaller rocks were present under the larger ones, and the unit floor became relatively uniform in rock size and density. The level was terminated at this depth, and the entire 2 x 2 m unit would once again be excavated as one lot (Level 2, Lot 2). The average thickness of Lot 1 was 10 cm, which was an average of 45 cmbgs in depth. Soil consisted of 7.5YR 3/3 dark brown friable silt loam, mottled with some 7.5YR 3/2 dark brown friable silt loam. Soil was transitioning to 5YR 3/3 dark reddish brown friable silt loam with depth. It was noted that the level contained a decrease in artifact density. A total of 19 ceramic sherds were recovered from Level 2, Lot 1. All identifiable sherds belong to the Terminal Classic, consisting of two Yokat Straiated var. Yokat, four Muna Slate, one Sacalum Black on Slate, and two Teabo Red. Based on these identifiable ceramics, the level is believed to date to the Terminal Classic Period. It is unclear why the rocks in Level 2, Lot 1 tended to be larger in size than those in the rest of the unit at that depth. One interpretation is that the larger rocks, possibly deposited as a fill episode, may also have once been present in the eastern portion of the unit, but had subsequently been dug out and removed in that area.

Level 2, Lot 2 excavation was started across the entire test unit after the larger rocks in the western portion were removed in Level 2, Lot 1. Moderately high amounts of cobble-sized and smaller rocks were present in Lot 2, and may be part of a fill episode. Soil consisted mainly of 5YR 3/3 dark reddish brown silt loam, mottled with some 7.5YR 3/3 dark brown friable silt loam near the top of the level. Level 2, Lot 2 was terminated when a relatively level and moderately compacted surface was encountered across the test unit. Small amounts of deteriorated *sascab* were also present at this depth, and the surface was thought to be a floor. Soil remained predominately 5YR 3/3 dark reddish brown in color at this level, and some stones were still present. The level averaged 10 cm in thickness, though this was somewhat variable across the unit. However, the average depth of the unit was a nearly level 55 cmbgs. Artifacts recovered from Level 2, Lot 2 consisted of 43 ceramic sherds, 24 of which were identifiable. One Chunhinta Black v. Ucu ceramic sherd belonging to the Middle Formative was recovered. Late Formative ceramics included two Chancenote Unslipped sherds and two Sierra Red sherds. Ceramic sherds belonging to the Early Classic included seven Yaxcaba, eight Xanaba Red, two Caucel Trickel on Red, and one Elote Impressed. One Muna Slate sherd belonging to the Terminal Classic was recovered from the level. Level 2, Lot 2 is considered to date to the Terminal Classic Period, based on the Muna Slate sherd and the presence of Terminal Classic ceramics located stratigraphically below, in Level 2, Lot 3.

Excavation of Level 2, Lot 3 began at an average depth of 55 cmbgs at the top of the moderately compacted and relatively level surface containing *sascab*. The surface appeared to be a floor, and soil became less compacted with depth during excavation. Soil remained 5YR 3/3 dark reddish brown silt loam, with some *sascab* being present. Level 2, Lot 3 artifacts consisted of a total of 187 ceramic sherds. Of these, 122 were identifiable. Middle Formative sherds included two Chunhinta Black v. Ucu, one Nacolal Incised, and one Tumben Incised. Ceramic sherds belonging to the Late Formative included one Chancenote Unslipped and four Sierra Red. Early Classic ceramics included 12 Yaxcaba sherds, 19 Xanaba Red sherds, two Dos Arroyos Orange Polychrome sherds, and one Elote Impressed sherd. Ceramic sherds associated with the Terminal Classic consisted of 53 Yokat Striated

var. Applique, 17 Yokat Striated var. Yokat, and nine Teabo Red sherds. Based on the recovery of these ceramics, the level is considered to date to the Terminal Classic Period.

Interpretation

Level 1, Lot 1 of Operation 1 at San Francisco is interpreted as being associated with the Postclassic Period, based upon the recovery of Chen Mul Modeled ceramic effigy *incensario* fragments. The presence of the *incensario* fragments suggest that the area facing the plaza on the west side of Structure S1E1-2, and possibly the structure itself, was used for ceremonial purposes. Some collapse from the structure was present at and near the ground surface. Level 1, Lot 1 of the unit was located on top of a cobble layer that is interpreted as being a fill episode for a raised platform, which further supports the idea that the area served a ceremonial purpose. Level 1, Lot 2 consisted of the cobble fill episode, and is considered to date to the Postclassic, based on the presence of Chen Mul Modeled ceramics. Level 1, Lot 3 is believed to have been a separate fill episode, as it consisted of slightly lighter soil and rocks that were somewhat smaller in size. It is unclear whether this fill episode dates to the Postclassic or Terminal Classic, as the ceramics recovered from the lot were not identified.

Level 2 is considered to be associated with the Terminal Classic Period, based on the recovery of identifiable ceramics from that time period. Level 2, Lot 1, located only in the western portion of the unit, contained larger rocks that may represent a separate fill episode. It is possible that the fill layer may have once been present across the entire unit, with the eastern portion having been dug out later in time. Level 2, Lot 2, which was present across the entire unit, contained moderately high amounts of cobble and smaller-sized rocks. This is thought to have been another fill episode that was deposited on top of a relatively level and compact surface that had some *sascab* present. This surface was interpreted as being a floor constructed during the Terminal Classic Period. The floor and subfloor were excavated as Level 2, Lot 3.

Excavation of Level 3, Lot 1 began at a change to another soil horizon, which became lighter in color and less compacted. The level was excavated to bedrock. While several ceramics recovered from the level belong to earlier time periods, most sherds are Yaxcaba Striated and Xanaba Red, suggesting that Level 3 is associated with the Early Classic Period.

Part 2: The *Ejido* of Saban

Chapter 15: San Francisco, Operation 2

Leslie Reyes

Operation 2 is a 2 x 2 m test unit located 60 m east of the San Francisco well and is situated on the west side of the bottom of Structure N1E1-3 (Figure 116). The purpose of Operation 2 is to explore the various construction phases associated with the site of San Francisco, more specifically, the area closest to Structure N1E1-3. An albarrada, built on the lower northwest side of Structure N1E1-3, is 1.5 m north of Operation 2 and extends 2 m to the west. The *albarrada* is constructed of several cut stones along with subrounded limestone boulders most likely taken from Structure N1E1-3. Large boulders and cobbles associated with construction materials from Structure N1E1-3 make up a majority of the eastern portion of the Operation 2 boundary. Cut stones and collapse rest on ground surface throughout the area. Exposed bedrock is visible near Structure N1E1-3 but is not continuous throughout the site of San Francisco. The topography in the San Francisco site area consists of medium- to low-lying structures with *milpas* at their base and continuing into adjacent flatter areas. Trees and shrubs cover the ground surface in the area. Several other structures are located nearby Structure N1E1-3 including, Structure S1E1-2, which is located roughly 12 m south. Operation 1, which was located along the western side of Structure S1E1-2, was approximately 30 m south of Operation 2.

Operation 2, Level 1, Lot 1 consisted of the excavation of sediments within the 2 x 2-m test unit boundary. First, excavators concentrated on the removal of surface vegetation and mapping surface collapse. Soil consistency for Operation 2, Level 1, Lot 1 was 10 YR 3/3 dark brown sandy loam. No mottles were present in the soil. Soil structure was moderate with well formed, distinct, granular peds that were medium to fine in size. Soil consistency when dry was hard, when moist soil consistence was firm, and when wet soil consistence was slightly sticky and slightly plastic. There were many fine to coarse roots in Operation 2, Level 1, Lot 1. One coarse root located in the middle of the test unit was burned probably due to modern *milpa* practices that were located nearby. Charcoal was observed but not collected by excavators because the charcoal was determined to come from the root burn associated with modern activities. Gravel content was 20-25 percent subrounded granules and pebbles with small to medium subrounded cobbles. Six large limestone boulders were located on the surface of Operation 2, Level 1, Lot 1 and were attributed to collapse from Structure N1E1-3. One of the 6 large limestone boulders was a cut stone which was partially located outside the eastern wall of the test unit boundary. Operation 2, Level 1, Lot 1 had both modern human disturbances as well as bioturbation disturbances. Modern human disturbance included the removal of stones from Structure N1E1-3 to create an albarrada along the northwestern side of the structure. Modern *milpas*, also near Structure N1E1-3 include the clearing of vegetation and the creation of barbed wire fences and albarradas to section off one *milpa* from another. The presence of *milpas* and their usage have in time created pathways through the vegetation near and around Structure N1E1-3. Bioturbation disturbances include tree roots and many snails and insect carcasses. Several large roots located within the Operation 2, Level 1, Lot 1 boundary are burned and because of this some of the artifacts recovered from Operation 2, Level 1, Lot 1 are also burned. The presence of snail shells and insect carcasses within the soil along with the hard gravel like peds may indicate that at one point in

time there was an area of ground surface that may have become flooded. The topography within the vicinity of Operation 2, Level 1, Lot 1 did have some areas of exposed bedrock while the actual test unit did not. The first exposure of bedrock in the test unit took place along the northern edge at 38 cmbs and dipped down in the northeast corner to 88 cmbs. The irregular bedrock horizon could have quite possibly helped to create pools of water in which snails and insects became trapped at one point in time. Cultural materials recovered within Operation 2, Level 1, Lot 1 include sherds dating to the Terminal Classic period and 10 Chen Mul Modeled Postclassic sherds. The date of this level is Postclassic period.

The purpose of Operation 2, Level 1, Lot 2 was to explore the presence of larger boulders found in the southern half of the test unit. Operation 2, Level 1, Lot 2 consisted of the excavation of soil around the large boulders while being careful to keep all rocks in place until excavators could determine whether or not there were any boulders *in situ*. Three large boulders were situated in the eastern portion of the unit and excavators thought that these three boulders may be part of the architecture of Structure N1E1-3 so the sediments that were located behind those boulders was left in place. Once all the roots and soil was excavated and screened excavators determined that these large boulders were not *in situ* but may be forming an alignment. The collapse was mapped and photographed before being removed and the three boulders that at the time were considered to be in alignment were left in place along with sediments behind them. Once again, soils were 10 YR 3/3 dark brown sandy loam. No mottles were present in the soil. Soil structure was moderate with well formed, distinct, granular peds that were medium to fine in size. Soil consistency when dry was hard, when moist soil consistence was firm, and when wet soil consistence was slightly sticky and slightly plastic. There were many fine to coarse roots in Operation 2, Level 1, Lot 2. Charcoal was observed but not collected by excavators because the charcoal was determined to come from the root burn associated with Operation 2, Level 1, Lot 1. Gravel content was still 20-25 percent subrounded granules and pebbles with small to medium subrounded cobbles. Nine large limestone boulders were located on the surface of Operation 2, Level 1, Lot 2 and were attributed to collapse from Structure N1E1-3. Operation 2, Level 1, Lot 2 had some bioturbation disturbances. Bioturbation disturbances include tree roots and many snails and insect carcasses. Cultural materials recovered from Operation 2, Level 1, Lot 2 include a variety of stone tools including an obsidian blade, broken bark beater and several pieces of chert debitage. Ceramic sherds dating from the Late Formative, Early and Terminal Classic are in abundance with a few sherds dating to the Postclassic period. Operation 2, Level 1, Lot 2 dates to the Postclassic period.

The purpose of Operation 2, Level 2, Lot 1 was to explore one rock that seemed to be *in situ* and the three boulders that may have been in an alignment with Structure N1E1-3. Excavators were hoping to find more rocks *in situ* and as well as possible rock alignments associated with architecture from Structure N1E1-3 but further excavation of this level revealed that the rocks were collapse. Excavators stopped digging and changed the level once the sediments within the Operation 2, Level 2, Lot 1 boundary were at the same elevation as the sediments of Operation 2, Level 1, Lot 2 closing elevations. Soils in Operation 2, Level 2, Lot 1 are 10 YR 2/2 very dark brown sandy clay loam. Soil consistency and structure remained consistent with the previous level. There were no mottles. Roots were common and ranged in size between fine and coarse. One large coarse tree root was located above the stone that was thought to be *in situ*. The soil horizon boundary was gradual and irregular. Gravels found in the soil remained the same. Gravels were 20-25 percent subrounded granules and pebbles with small to medium subrounded cobbles. No

charcoal was observed in Operation 2, Level 2, Lot 1. The only disturbance within Operation 2, Level 2, Lot 1 was a large, coarse tree root that had grown around a stone that appeared to be *in situ*. There were no other stones in this level that were *in situ*. All other stones were considered to be collapse. The root had not moved the stone and did not seem to be affecting its positioning at the moment. Cultural materials recovered from Operation 2, Level 2, Lot 1 include 1 chert projectile point. Other cultural materials that were recovered from this level included larger rims and many smaller ceramic sherds. Ceramic sherds dating from the Late Formative, Early and Terminal Classic periods were present as well as 2 Chen Mul Postclassic period sherds. Operation 2, Level 2, Lot 1 dates to the Postclassic period.

Operation 2, Level 2, Lot 2 consisted of the excavation of sediments across the entire 2 x 2 test unit. Six large subrounded boulders lie on the surface; the three boulders that were originally thought to be part of an alignment pertaining to a possible west facing wall of Structure N1E1-3, and three larger boulders situated in the western portion of the test unit boundary. There were no architectural elements found within Operation 2, Level 2, Lot 2. All boulders were considered to be collapse. The level was changed soon after excavation of Operation 2, Level 2, Lot 2 began due to a soil color change. Operation 2, Level 2, Lot 2 soils consisted of 10 YR 4/3 brown sandy clay loam. No mottles were present. Soil structure was moderate with medium granular shaped peds. The soil consistency when dry was hard with gravel like peds being easy to crush between the thumb and forefinger. Soil consistency when moist was friable and when wet soil consistence was slightly sticky and slightly plastic. Roots were common and ranged in size from fine to coarse. The soil horizon boundary was diffuse and smooth which made it difficult for excavators to notice at first that there had been a color change. Gravel content was the same as the previous level and lots. Gravels consisted of 20-25 percent subrounded pebbles and small subrounded cobbles. There was no charcoal observed while excavating or screening the sediments within Operation 2, Level 2, Lot 2. Disturbances include large roots growing around some of the collapse and extending across the floor of the test unit. These roots may cause some slight movement of cultural materials within the soil matrix but that movement would probably be minimal. Cultural materials recovered from Operation 2, Level 2, Lot 2 include sherds dating from the Middle and Late Formative, as well as, Early, Late and Terminal Classic periods. Operation 2, Level 2, Lot 2 dates to the Terminal Classic.

Operation 2, Level 2, Lot 3 was located along the eastern portion of the Operation 2 test unit. The purpose of Operation 2, Level 2, Lot 3 was to explore a stone that was *in situ* along the eastern edge of the 2 x 2 m test unit. Excavators had hoped that there would be architecture associated with the *in situ* stone but there was no such finding. Soils were excavated down to the chac luum soil layer that was already present in much of the rest of the test unit. Soils stayed consistent with previous levels. There were no mottles. Operation 2, Level 2, Lot 3 had many fine to medium roots. Gravels consisted of 20-25 percent subrounded pebbles with small subrounded cobbles. Some *sascab* pebbles were observed by excavators but not evidence of a floor or an associated platform were ever found. No charcoal was observed. Minimal disturbances, including several roots, probably did not have an effect on the movement of cultural materials within this lot. Cultural materials recovered from Operation 2, Level 2, Lot 3 include ceramic sherds that date from the Late Formative through the Terminal Classic period. Operation 2, Level 2, Lot 3 dates to the Terminal Classic period.

As was stated previously, the level was changed when excavators encountered a soil color change while excavating Operation 2, Level 2, Lot 2. Operation 2, Level 3, Lot 1

consisted of the excavation of sediments found within the Operation 2 test unit boundary. Excavators encountered bedrock in the northern half of the unit not long after the level was opened. Bedrock was exposed at 38 cmbs in the entire north portion of the test unit except for the northeast corner and extended south to about 1 m. The bedrock had a gradual slope in a southerly direction. The remaining south portion of the unit still had sediments and no exposed bedrock. Bedrock was finally exposed in the southern portion of the unit at 55 cmbs. Soils in Operation 2, Level 3, Lot 1 consist of 10 YR 3/3 dark brown sandy loam with a gritty texture. There were no mottles but excavators made note that there was a sparse amount of *sascab* pebbles within the sediments. The soil in this level formed gravel like peds that were easily crushed by the thumb and forefinger. Soil was slightly hard when dry, friable when moist, and slightly sticky and slightly plastic when it was wet. Roots were common and fine to medium in size. Many roots followed the bedrock in a mat like manner. Gravel content stayed consistent with previous levels and included 20-25 percent subrounded pebbles and small subrounded cobbles. There was no charcoal observed in this level. Disturbances included one animal burrow located in the northeast corner of the test unit. This could either be part of an ant nest or some other insect but most likely not a nest made by a rodent. There was no intermixing of cultural materials because of this nest. Cultural materials recovered from Operation 2, Level 3, Lot 1 include ceramic sherds including several medium and large rim sherds that date between the Middle Formative through the Terminal Classic period. Operation 2, Level 3, Lot 1 dates to the Terminal Classic period. At this point in time, excavators decided to change the level before continuing to excavate the northeast corner of Operation 2 because the excavators were not sure whether the depression in the bedrock was a natural feature or a man made feature.

Operation 2, Level 4, Lot 1 consisted of the excavation of sediments that had accumulated inside of a depression located in bedrock that was situated in the northeast corner of the Operation 2 test unit. The depression measured 1 m across from north to south. Bedrock located within the depression sloped in a northerly direction which pinched the floor of the depression to 45 cm in length. Excavators stopped digging at 88 cmbs because they encountered bedrock. Soils in Operation 2, Level 4, Lot 1 consist of 10 YR 3/3 dark brown sandy loam and were similar to the soils in Operation 2, Level 3, Lot 1. There were no mottles within the soil in this level. The soil formed gravel like peds that were easily crushed by the thumb and forefinger. Soil consistency was slightly hard when dry, friable when moist, and slightly sticky and slightly plastic when it was wet. Roots were common and fine-to-medium in size. Gravel content stayed consistent with previous levels and included 20-25 percent subrounded pebbles and small subrounded cobbles. No charcoal was observed in Operation 2, Level 4, Lot 1 but one burned rock was observed in the screen. Cultural materials recovered from Operation 2, Level 4, Lot 1 include ceramic sherds that date between the Middle and Late Formative period and Terminal Classic period. Operation 2, Level 4, Lot 1 dates to the Terminal Classic period (Figure 119).

In conclusion, the purpose of the Operation 2 test unit was to explore the various construction phases associated with the site of San Francisco, more specifically, the area closest to Structure N1E1-3. Excavators had hoped that by placing a 2 X 2 m test unit next to Structure N1E1-3 the project would collect data via floors and platform construction that would give archaeologists a better understanding of the various time periods in which people may have been using the immediate area. Unfortunately, no intact floors and no construction phases were observed. The only possible floor was the presence of *sascab* pebbles found within the soil during the excavation of Operation 2, Level 3, Lot 1. It is not clear as to

whether or not the *sascab* was in fact a floor or if the *sascab* may have come from the erosion of collapsed stones found on the surface and within the above levels. Further excavation and additional test units may be needed to get a better understanding of the construction of plazas and platforms in the area. What archaeologists did gather from excavations was that there was an occupation during the Middle and Late Formative period, followed by Early Classic and Terminal Classic periods, and finally a Postclassic period (Figure 120).

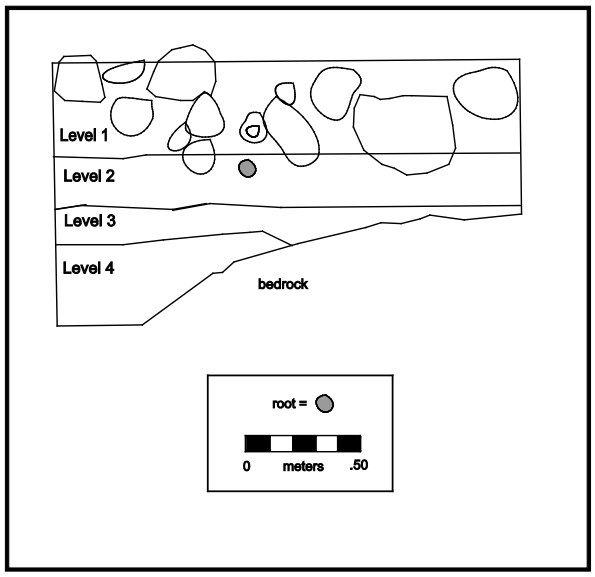


Figure 119. San Francisco, Operation 2, East Profile

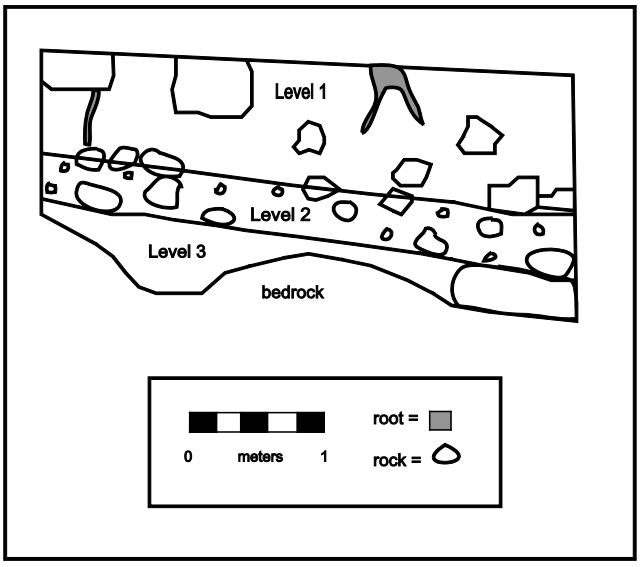


Figure 120. San Francisco, Operation 2, South Profile

Part 2: The *Ejido* of Saban

Chapter 16: Venadito, Operation 1

Karleen Ronsairo

Operation 1 of Venadito was a 2x2m test pit located to the west of Structure S1W1-13 in front of the stairs that lead to its summit (Figure 121). The purpose of Operation 1 was to explore the chronology of the area around Structure S1W1-13 and the activities of the Prehispanic people who occupied this site. Operation 1 was shallow and consisted of one natural level.

After removing the vegetation from the surface, Level 1, Lot 1 of Operation 1 consisted of black (10YR 2/1) soil, medium-sized cobbles, and a few large rocks (Figure 122). There were large root disturbances in the northeast and southeast sides of the unit. The ceramics recovered from this level belong to the Terminal Classic, as evidenced by the Yokat Striated var. Yokat, Muna Slate, Tekit Incised, and Teabo Red types. Further, a concentration of Postclassic Chen Mul *incensario* fragments was found in the northwest corner of the unit (see Chapter 42).

After excavating the soil and removing the large rocks and from Level 1, Lot 1, bedrock was exposed at various depths, from 13-49 centimeters below surface (Figure 123). The south profile of Operation 1 demonstrates the irregular bedrock exposed (Figure 124). After exposing the bedrock, a final photo was taken (Figure 125) and the unit was backfilled to its original surface level (Figure 126).

Interpretation

The excavation of Operation 1 did not encounter a cultural feature. However, the presence of Terminal Classic ceramics and Postclassic Chen Mul (*incensario*) fragments in the area around Structure S1W1-13 indicate that there may have been a reoccupation of the site after the Terminal Classic period, as well as ritual activities associated with the Postclassic period. Moreover, although Operation 1 consisted of one shallow natural level, the present of medium-sized cobbles and large rocks in the area indicate that there was at least one construction phase at Venadito.

Operation 1 and other test pits excavated at Venadito during the 2014 CRAS field season (see Chapters 17 and 18) provide us with a better understanding of the chronology of the site and the activities of the Prehispanic people who occupied Venadito.

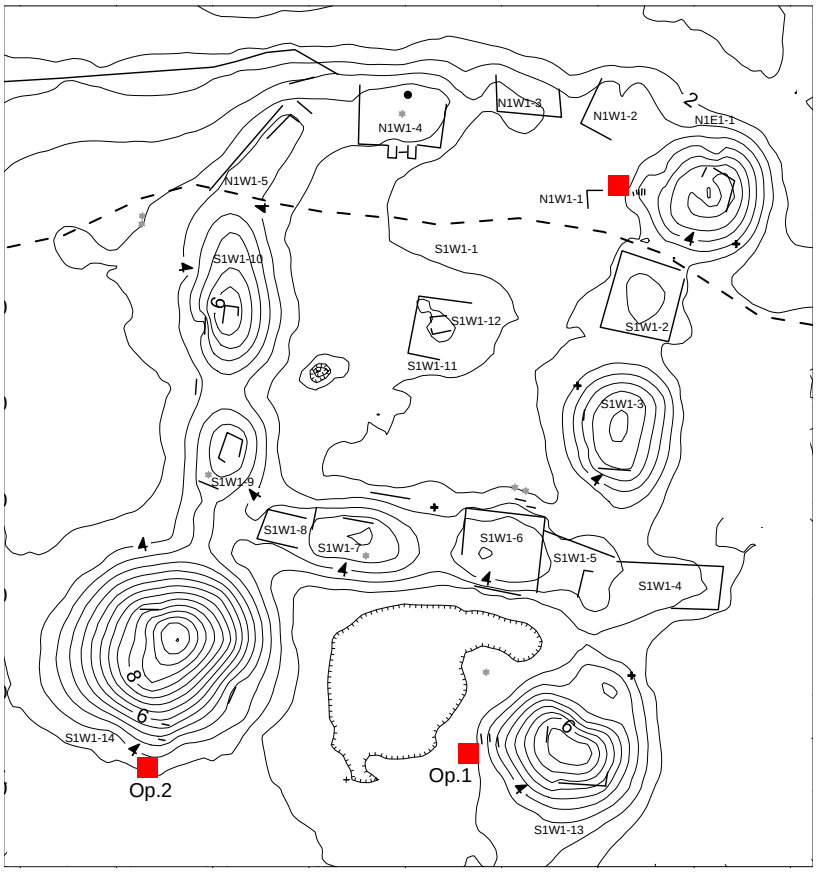


Figure 121. Location of Test Pits at Venadito

Figure 122. Venadito, Operation 1, Level 1, Lot 1

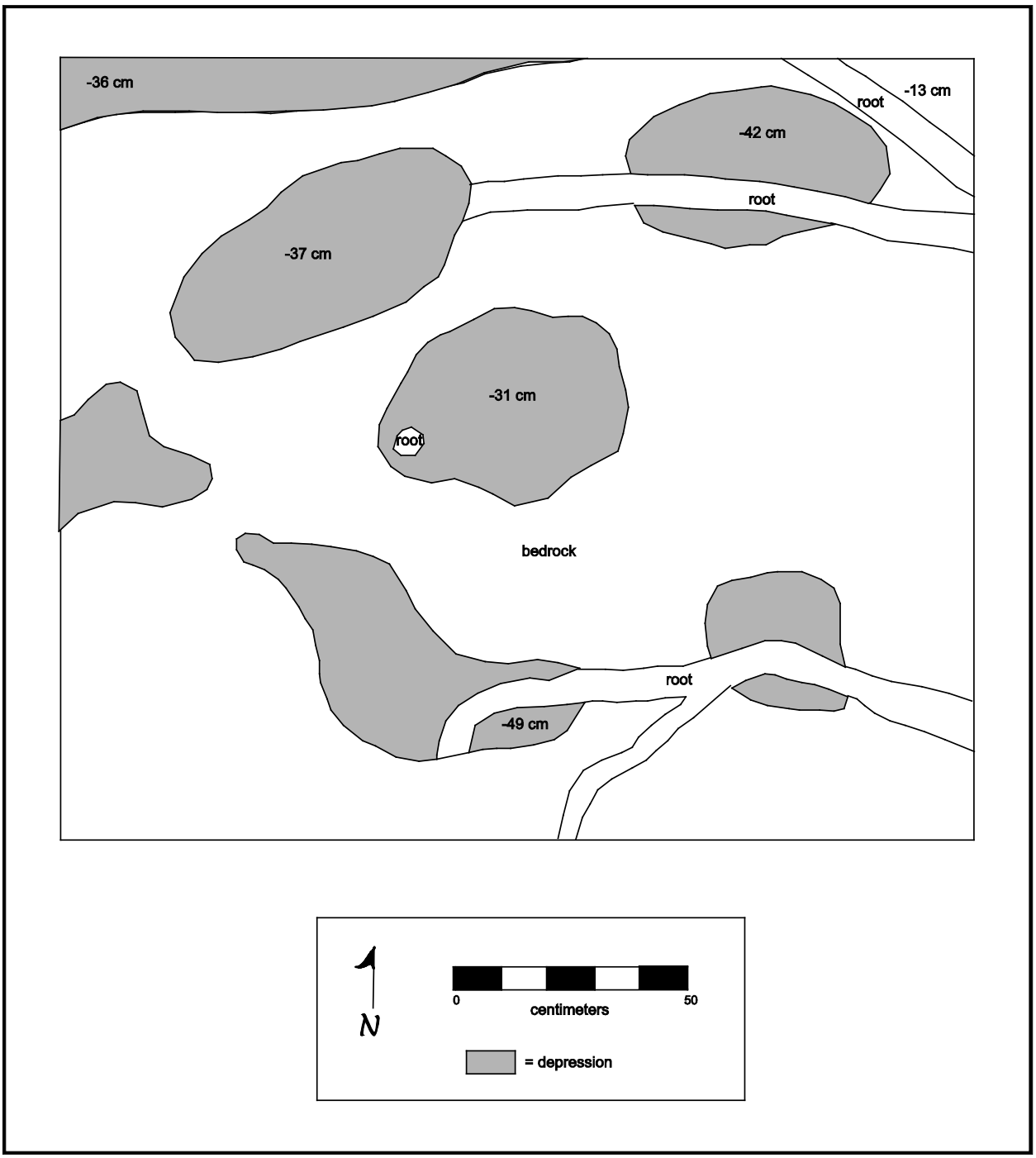


Figure 123. Venadito, Operation 1, Plan Map at Bedrock

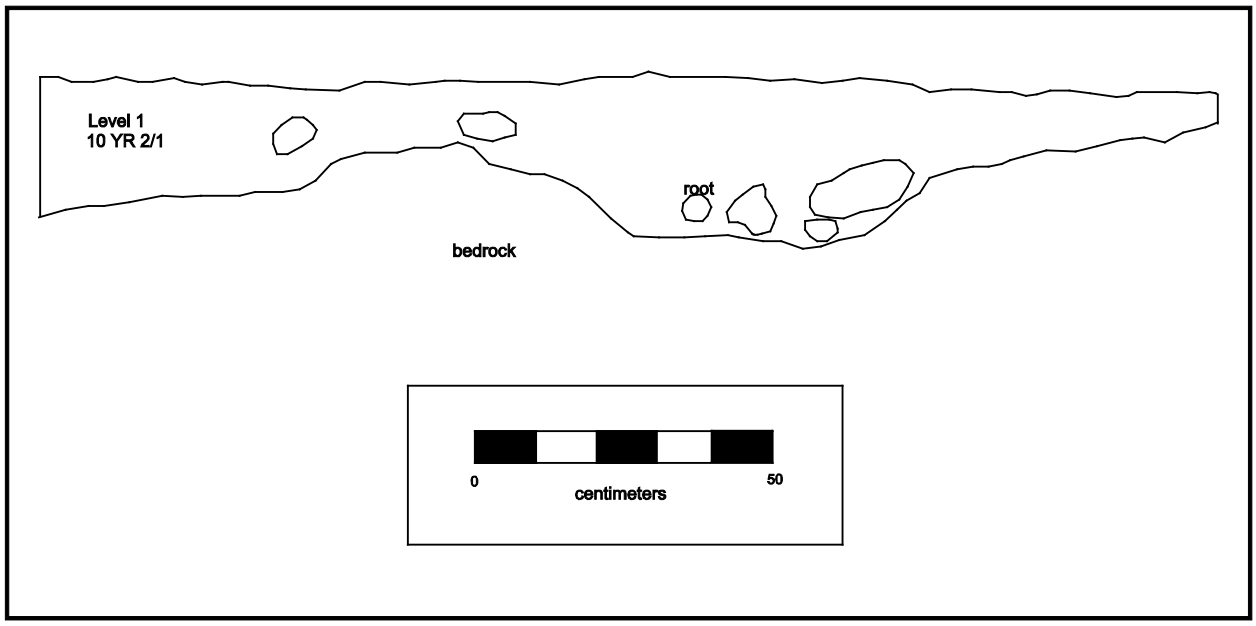


Figure 124. Venadito, Operation 1, South Profile

Figure 125. Venadito, Operation 1, Bedrock

Figure 126. Venadito, Operation 1, Backfilled

Part 2: The *Ejido* of Saban

Chapter 17: Venadito, Operation 2

Jorge Pablo Huerta Rodríguez

This excavation unit was located south of Structure S1W1-14 (Figure 121), a 5-m-tall pyramidal construction that is the largest structure of the settlement. The operation was a 2 x 2 m test pit, which was excavated following the natural stratigraphy. The location of this unit was designed to find a midden or some form of deposit that might not only provide temporal information, but also data related to the activities that took place in this part of the site.

The surface of the unit was covered with leaf litter, which was removed to establish the limits of the excavation (Figure 127). Subsequently, the excavation progressed through the removal of a dark grayish brown sediment (10YR 3/2), which had an average depth of 20-25 cm. The sediment that formed this layer was clayey and contained several small- and medium-sized stones (smaller than 20 cm).

It is noteworthy that in almost half of the unit two large roots were located, which crossed the excavation from south to north (Figure 128). For this reason, in addition to a small change in color, it was decided to switch to Level 1, Lot 2. This lot consisted of the same type of sediment as the above-mentioned deposit. Removal of this layer led to the discovery of a change in sediment type, which was designated as Level 2, Lot 1 (Figures 129 and 130). Ceramic material found in both lots were from types including Yokat Striated var. Yokat and Muna Slate, both from Terminal Classic.

Level 2 consisted of a clayey sediment, with a dark reddish-brown color (2.5 YR 3/2), which also had a series of stones of about 20 x 20 cm in size, perhaps from the collapse of the nearby structure. Besides these rocks, a number of stones about 10 x 7 cm were also found, which were deposited randomly. The removal of this level led to the discovery of bedrock in almost the entire all unit, except in the southeast corner, where only the aforementioned reddish sediment was found (Figure 131). Therefore, it was decided to establish another lot (Level 2, Lot 2). Ceramic material located in Level 2, Lot 1 belonged to the types Yokat Striated var. Yokat and Muna Slate from the Terminal Classic (see Chapter 40).

Level 2, Lot 2 was the same type of sediment as the previous lot, and was fully excavated until bedrock was uncovered throughout the unit (Figure 132). The color of this lot was the same as Level 2, Lot 1, thus is thought to have been part of the same deposit. No ceramics were located in this Lot 2; therefore it is possible that this has been a sterile layer, culturally speaking. Once registration of the unit (Figure 133), through photographs and drawings took place, we proceeded with the backfill the unit up to its original level (Figure 134).

Figure 127. Venadito, Operation 2, Surface

Figure 128. Venadito, Operation 2, Level 1, Lot 2

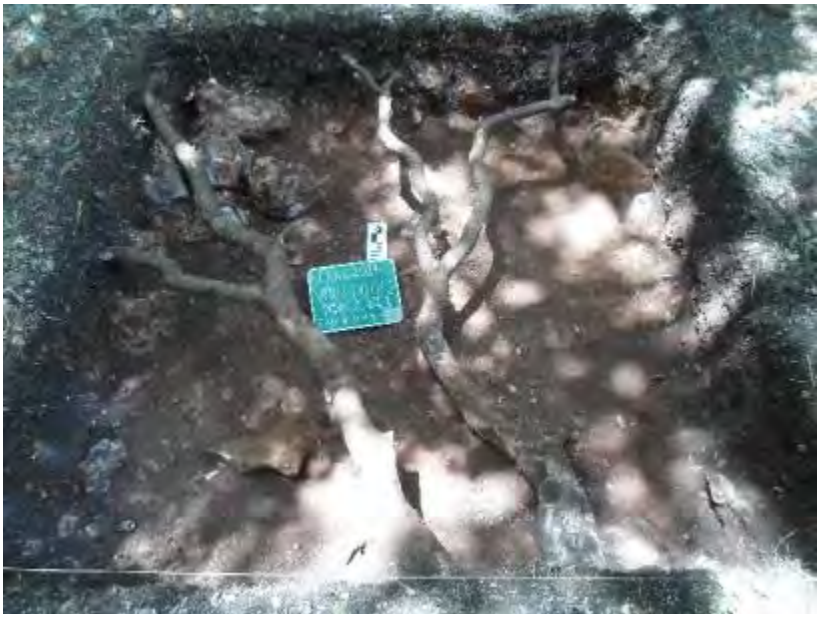


Figure 129. Venadito, Operation 2, Level 2, Lot 1

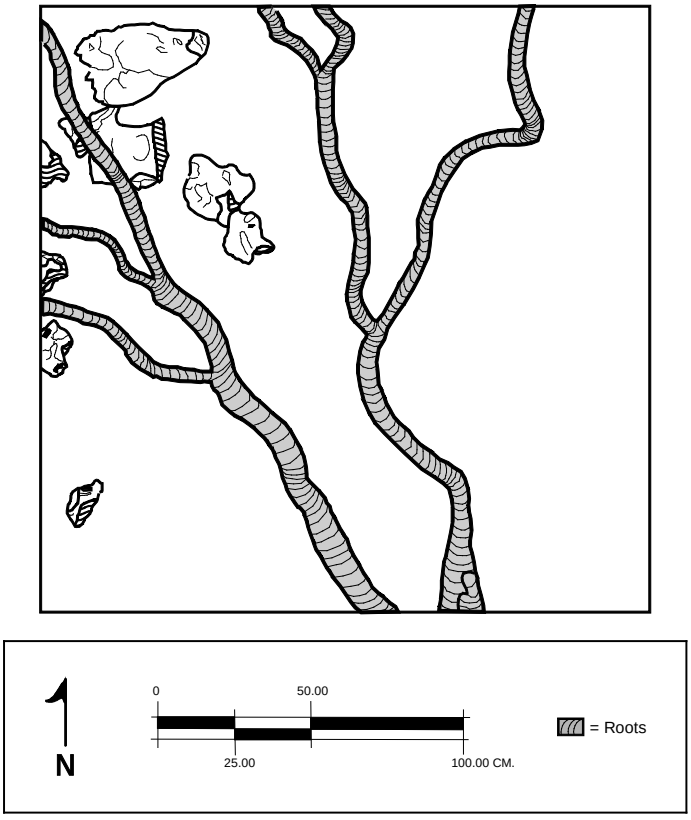


Figure 130. Venadito, Operation 2, Level 2, Lot 1 Plan Map

Figure 131. Venadito, Operation 2, Level 2, Lot 2

Figure 132. Venadito, Operation 2, Bedrock

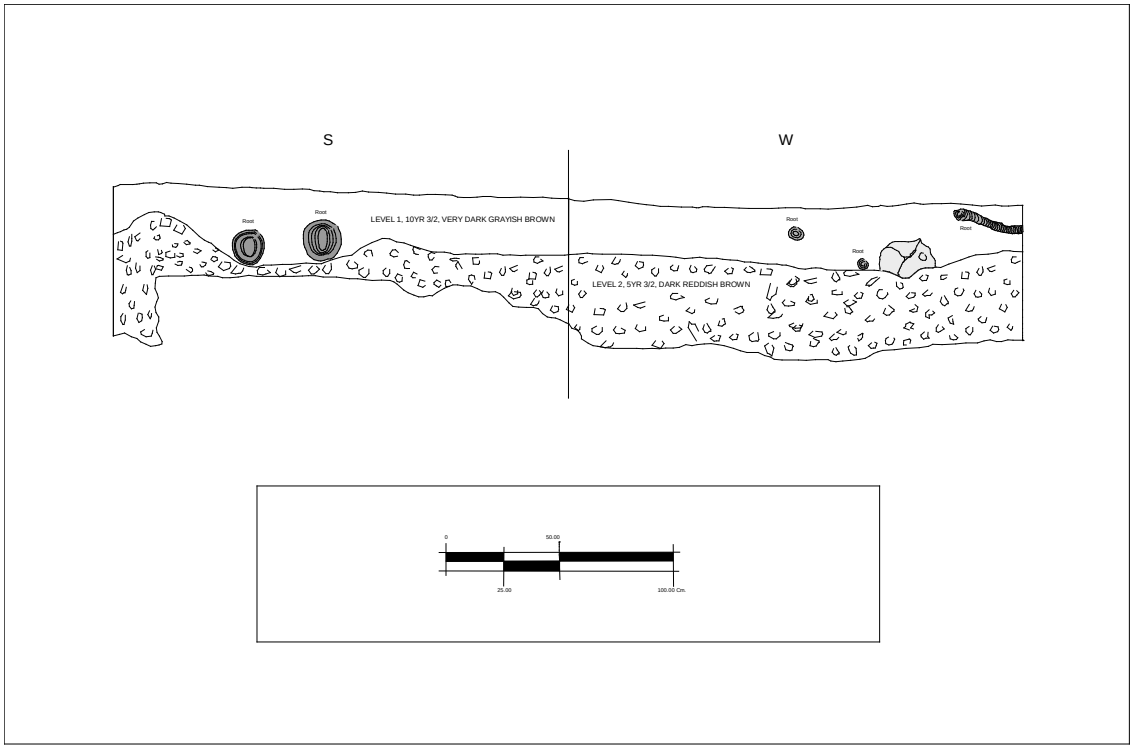


Figure 133. Venadito, Operation 2, South and West Profiles

Figure 134. Venadito, Operation 2, Backfilled

Interpretation

Both Level 2, Lot 1 and Level 2, Lot 2 were part of the natural ground surface, which must belong to the Terminal Classic period, as evidenced by ceramic types Yokat Striated var. Yokat and Muna Slate. This layer represents when the first occupation of the site was established and it might have consisted of only a few platforms and buildings.

Subsequent to this, but also during the Terminal Classic in Level 1, Lots 1 and 2, would have been the time when most of the buildings on the site were built, representing its major occupation.

However, no cultural feature was located in this level. In this layer, stones from the collapse of the nearby building were also found; therefore, this layer contains information from since the site was first built until it was abandoned without a visible separation. This was anticipated because the area where the unit is located corresponds to the rear of the Structure S1W1-14, but the expected midden was not present.

Despite this, this unit, along with the other two operations carried out on this site, start to allow provide a better picture of the timing and characteristics of this settlement.

Part 2: Saban *Ejido*

Chapter 18: Venadito, Operation 3

Alejandra Badillo

Operation 3 of Venadito was planned to establish a relative chronology and to know more about the construction system of the northern portion of this site. For that reason, a 2x2 test pit was located west of Structure N1W1-1 (Figure 121).

Excavation started by removing the 1- to 2-cm -hick leaf litter (Figure 135). Once this surface layer was removed, a very dark gray (7.5 YR 3/1) clayish sediment was observed, which contained fine roots and gravel (about 5-9 cm long). In total, this strata was around 4-7 cm deep (Figure 136).

Below the previous layer, Level 2 Lot 1 was located, defined by a change in color to a dark brown (7.5 YR 7/2). The composition of this strata was still claysh, with a medium-to-low compaction, and contained several fine roots and gravel (from 4-to-14 cm thick). In the east corner of the unit, a few Chen Mul Modeled fragments were located, mixed with Terminal Classic ceramics, including examples of Yokat Striated Applique Variety, Muna Slate, Sacalum Black-on-Slate, among others. In addition, an obsidian blade fragment was found (Figure 137).

After the extraction of the previous level, an abundant quantity of pebbles and gravel (around 5-9 cm long) was found, along with 2 stones over 20 cm wide and a large root 6 cm in diameter, located in the southeast corner. This layer, named Level 2, Lot 2, was a clayish sediment of 10-to-12 cm in depth, with the same color as the previous lot and a medium-to-low compaction (Figure 138). A flint striker was excavated from this lot, as well as ceramic fragments from Terminal Classic, including Aki Impressed, Teabo Impressed, Becal Incised, among others.

Level 3, Lot 1 was cultural layer that was 8 to 16 cm thick, which corresponds to a construction fill made with irregular stones (about 5 to 25 cm in width), mixed with a clayish soil of medium-low compaction, and brown in color (7.5YR 4 / 2). Ceramics from this lot were from the Terminal Classic (Figure 139).

At the end of this lot, a variation in the content was detected, evidenced by a great reduction in the amount of the large stones; therefore it was decided to change to Level 4, Lot 1, which consisting of a loamy sediment, dark grayish brown (10YR 4/2) in color, with low compaction and a high content of gravel. In addition, several white spots were observed that are the remains of a degraded stucco floor. The thickness of this layer was 3-10 cm (Figure 140).

Below this lot, a subfloor of 5-to-17 cm in depth was located (Level 4, Lot 2). This layer was composed of a mixture of gravel (of roughly 10-25 cm wide) and a claysh sediment, with low compaction, and the same color as the one of the previous lot (Figure 141).

This gravel fill preceded a construction fill of medium-sized rocks about 20-50 cm in size (Level 4, Lot 3), that also included a 75-cm-long large rock (Figure 142. This construction fill was mixed with a matrix of a brown color soil (7.5 YR 4/2), which had a thickness of 10 to 22 cm. Ceramic sherds at this level suggest an earlier chronology,

Figure 135. Venadito, Operation 3, Surface

Figure 136. Venadito, Operation 3, Level 1, Lot 1

Figure 137. Venadito, Operation 3, Level 2, Lot 1

Figure 138. Venadito, Operation 3, Level 2, Lot 2

Figure 139. Venadito, Operation 3, Level 3, Lot 1

Figure 140. Venadito, Operation 3, Level 4, Lot 1

Figure 141. Venadito, Operation 3, Level 4, Lot 2

Figure 142. Venadito, Operation 3, Level 2, Lot 3

evidenced by samples of types such as Tumben Incised and Sierra Red; however several Terminal Classic fragments were also present. In addition, another flint striker was found . Excavation continued with other fill, composed of a brown soil (7.5 YR 4/3) that contained roughly 40% pebbles, characterized by a low compaction. This deposit, named as Level 4, Lot 4, had a thickness of 3-20 cm (Figure 143).

Finally, Level 5, Lot 1 was a leveling made with gravel placed directly on bedrock (on the north or northwest side of the unit), while in the south and southeast areas of the pit a *sascab* deposit was located. This area also was mixed with a yellowish red soil (5 YR 5/6) that was 18 cm thick. Adding together all of the levels and lots excavated in this unit reached a total of 101 cm in depth from the ground level (Figures 144 and 145).

Once a detailed documentation of the unit was concluded, the unit was backfilled with the same material that was extracted during the excavation (Figures 146 and 147).

Interpretation

Based on data from this test unit, we can argue that the northern plaza of Venadito had at least two construction phases. The last one of these episodes corresponds to the same time of Structure N1W1-1, which is located in the northeast of this open area.

The construction of this area began toward the Early Classic period, when a leveling of uneven ground was conducted, evidenced by a layer of soil and gravel, which was the base for another soil layer and gravel that was the subfloor of a stucco floor. Over time, another architectural modification was carried out, which consisted of the construction of a second elevation that covered the first phase of occupation. This episode was performed at some point during the Terminal Classic.

Later, building activity continued with the placing of another construction fill, this time made with smaller rocks. Over this fill, a thicker subfloor was placed. Based on that, it is assumed that Structure N1W1-1 is associated with this period, which also corresponds to the Terminal Classic. During the Postclassic the site was abandoned. Therefore, it would be necessary conduct more excavations to get a better understanding of this area of the site.

Figure 143. Venadito, Operation 3, Level 4, Lot 4

Figure 144. Venadito, Operation 3, Level 5, Lot 1

Figure 145. Venadito, Operation 3, Northwest and Northeast Profiles

Figure 146. Venadito, Operation 3, Process of Backfilling

Figure 147. Venadito, Operation 3, Backfilled

Part 2: The *Ejido* of Saban

Chapter 19: Yo'okop, Operation 16

Alberto G. Flores Colin

Since the early years of the project, Yo'okop has been one of the key sites in the research of the Cochuah region, not only for its monumentality, but also by its own characteristics, such as its geographical position and its causeways or *sacbe* system.

As part of the continuity of the documentation tasks, this season a series of tests units were proposed (see Chapters 20-26). These operations are part of a sampling program areas associated with the causeways (Flores 2013a; 2013b; 2013c; 2013d, 2013e), in order to obtain a more precise date for the construction of these elements and plaza areas that are connected. Based on evidence from past seasons, we have developed the hypothesis that Yo'okop had a territorial expansion during Terminal Classic.

One of these operations was Operation 16, which was in the first plaza of Group A of Yo'okop (Figure 148). This square is the area that is the beginning/ end of Sacbe 1, which goes to Group B (Figure 149). As has been mentioned, this operation was planned with the aim of establishing a relative date for both the Sacbe 1 and this end plaza, as well as determining if this part of the site had several previous construction phases or was built in one episode.

This excavation was located in the terminus plaza of Sacbe 1, where the causeway joins with the square. The goal of the location of this unit was to obtain data from the immediate context of the beginning / end of this *sacbe*. The closest structures are Structure S4W1-1, the largest pyramidal mound at the site, locally known as "the Castillo" and Structure S4E1-5, a small mound that might have been a small temple.

Operation 16, like all the test units excavated this season at Yo'okop, was conducted following natural stratigraphy and was a 2 x 2 m test pit (Figure 150). Level 1, Lot 1 was a layer of black soil (5 YR 2.5/1) mixed with abundant pebbles (about 5 x 7cm), and was evenly compacted. This level had an average depth of about 12 cm and ended when a layer of larger stones was uncovered (Figures 151 and 152). Ceramics located in this level belonged to the Muna Slate and Yokat Striated var. Yokat types, from the Terminal Classic; furthermore three Chen Mul Modeled fragments from the Postclassic were located.

The next layer (Level 2, Lot 1) was composed of large stones, about 15 x 25 to 40 x 70 cm on average, which were placed as a dry fill, that is, without cement. This level corresponds to the construction fill of the plaza; in total, the average depth of the layer was about 70 cm. It is noteworthy that the size of the stones increased as the excavation reached a greater depth; the largest stones were located at the end of Level 2, Lot 1. Due the composition of the fill, no ceramic fragments were found.

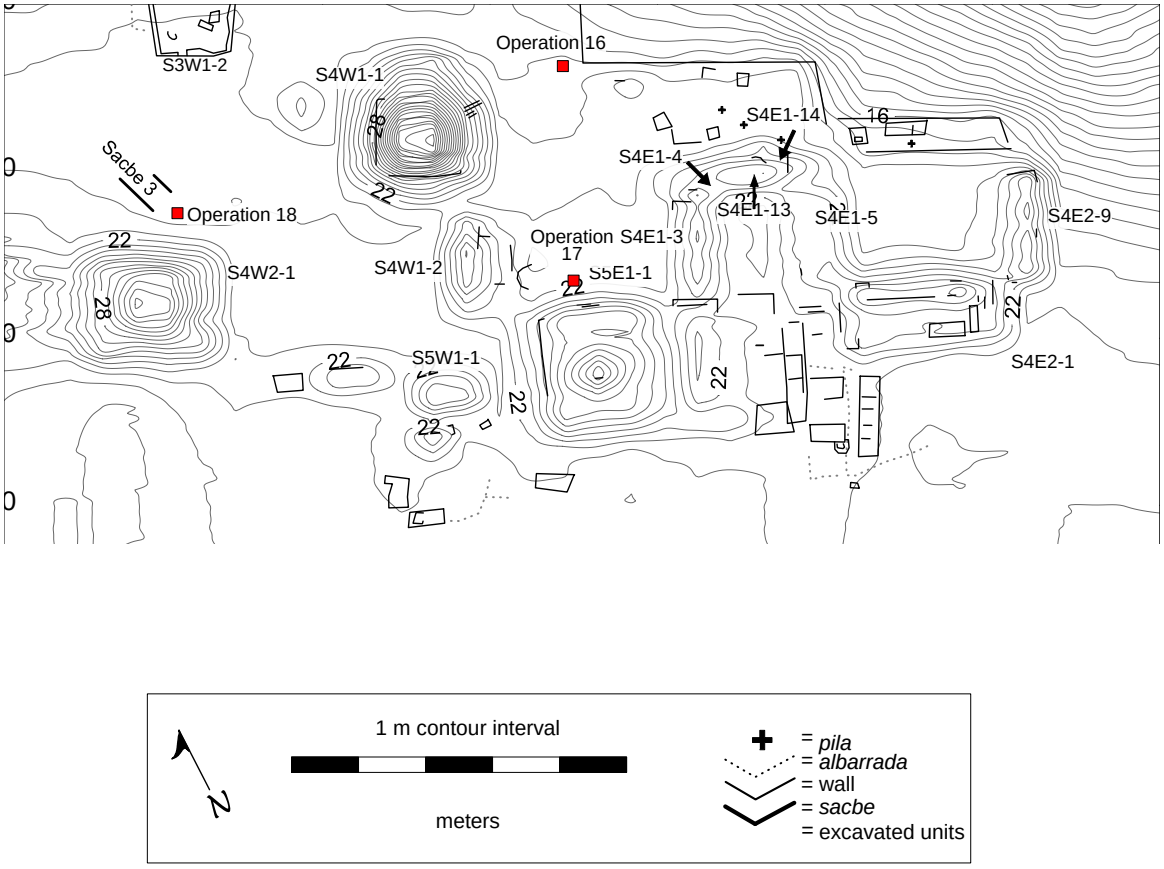


Figure 148. Yo'okop, 2014 Test Pit Locations

Figure 149. The Site of Yo'okop

Figure 150. Yo'okop, Operation 16, Before Excavation

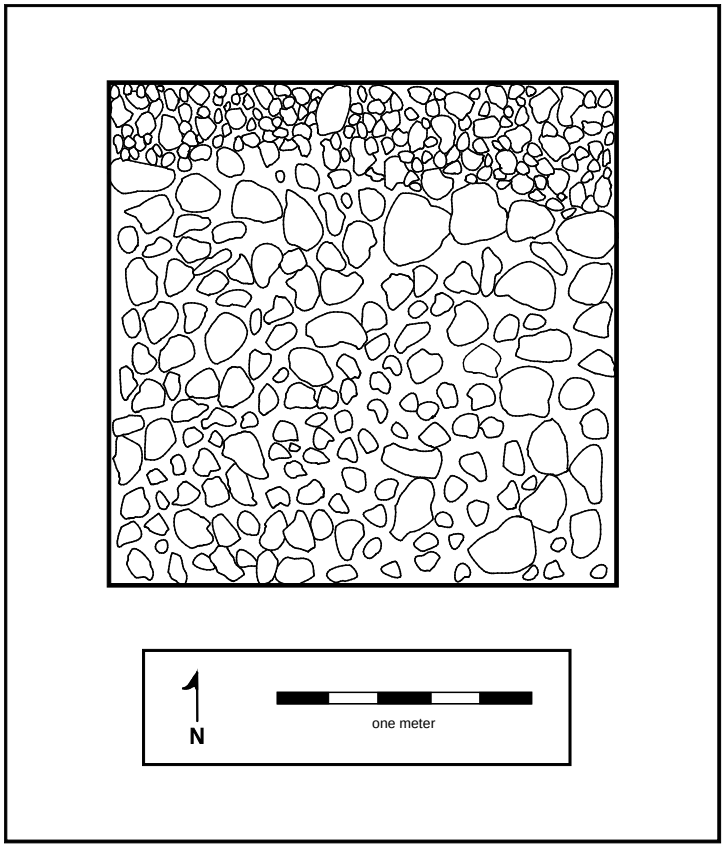


Figure 151. Yo'okop, Operation 16, Level 2, Lot 1, Plan Map

Figure 152. Yo’okop, Operation 16, Level 1, Lots 1 and 2

Once all of the dry core fill was removed, a new layer of sandy soil, brown in color (7.5 YR 5/3) was uncovered, which was designated Level 2, Lot 2. Compaction of this level was very loose and a large quantity of ceramics was located (345 sherds) in this strata. Although the ceramic sample obtained is mostly from the Early Classic (with types such as Yaxcaba Striated and Xanabá Red), four Terminal Classic sherds were found (see Chapter 40). Level 2, Lot 2 had an average depth of 35 cm.

After the removal of this last layer, bedrock was found in the entire unit; its surface had a very irregular shape and several cavities (Figure 153). These cavities were excavated as Level 2, Lot 3; several reached 30 cm below the surface of the bedrock. Ceramics located in Level 2, Lot 3 was very similar to those of Level 2, Lot 2, although two Terminal Classic sherds were also located; one was from the type Sacalum Black on Slate, while other was Teabo Red (see Chapter 40).

Once the bedrock was exposed in the whole unit, the registration process was conducted, which consisted of photographs and drawings (Figure 154). When these tasks were completed, the unit was backfilled with all the material that had been extracted from the excavation, concluding this way the excavation of this operation (Figure 155).

Interpretation

While this operation did not have a sealed context with which could have established a more accurate chronology for this part of Yo'okop, results are useful for describing the construction sequence of this plaza.

Level 2, Lot 2 and Level 2, Lot 3 correspond to the natural ground surface, on which the first occupation of this part of the settlement must have been established. Most ceramics recovered in the unit corresponds to these two lots. Although mostly the sherds date from the Early Classic period, five fragments dating to the Terminal Classic were also found. Due to their low frequency, compared with the total of the sample (5 out 350 fragments), it is possible that its presence was caused by an accidental mixture, which could have occurred due to the instability of the excavation profiles, mainly in the section of the dry core fill (Level 2, Lot 1). Therefore, it is possible to assume with relative certainty that the surface of Level 2, Lots 2 and 3 dates from the Early Classic.

Following this, at some point during Terminal Classic, an elevated surface was created. For this reason, dry core fill was placed in order to create a new level. This episode corresponds to Level 1, Lot 1 and Level 2, Lot 1, which are part of the same single construction episode of this plaza. Large stones were used at the base, in order to provide greater stability in the building process for this type of leveling. After these larger stones, medium-sized stones and so on were placed up to the size of gravel stones, locally known as *chich*. Over this gravel there must have been a layer of *sascab* or stucco, which was the final surface of the square.

The preponderance of Terminal Classic ceramics dates this construction to that period. This is consistent with the evidence that has been found in other units at the terminal areas of other causeways of Yo'okop, which gives more support to the hypothesis that the causeway system at this site, and its adjacent spaces, are part an

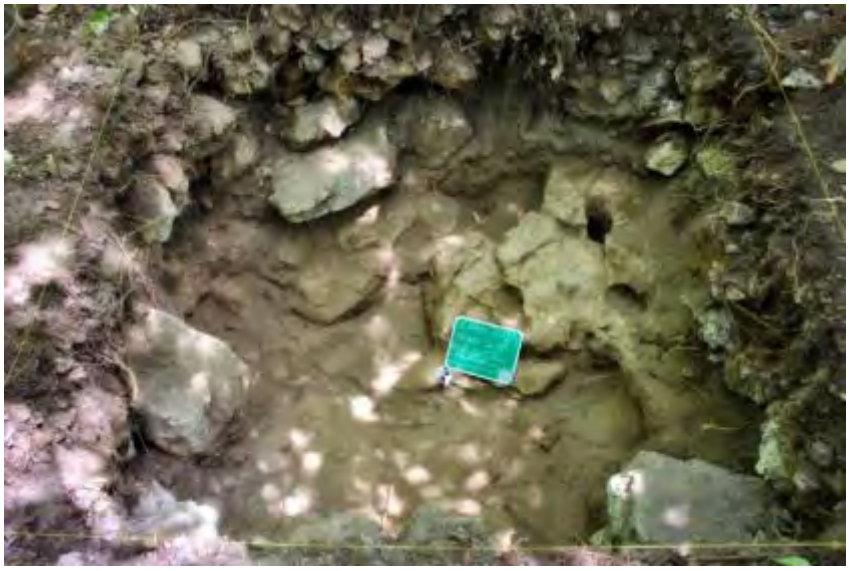


Figure 153. Yo'okop, Operation 16, Level 2, Lot 3

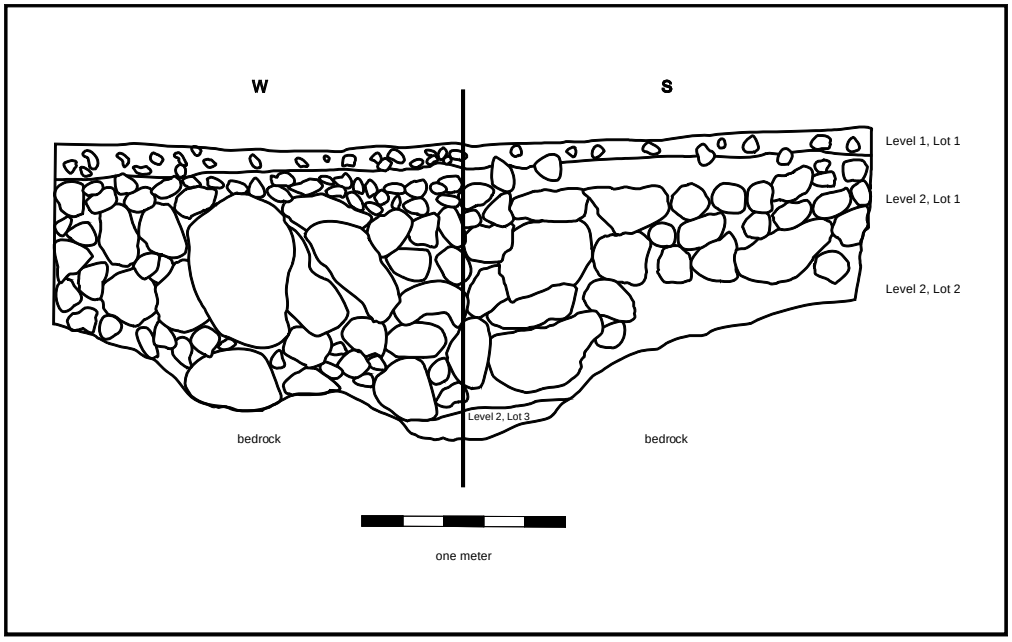


Figure 154. Yo'okop, Operation 16, West and South Profiles

Figure 155. Yo’okop, Operation 16, Backfilled

expansion period in which Yo'okop had a greater amount of resources to invest in monumental works.

Although much remains to be understood about Yo'okop, the continued excavation of this kind of unit helps to gradually increase our knowledge about this site. In addition, these results help to raise and support the hypotheses regarding occupational and construction sequences that took place in this settlement.

Part 2: The *Ejido* of Saban

Chapter 20: Yo'okop, Operation 17

Leslie Reyes

Yo'okop Operation 17 was located 2 m northeast of the front stairway of Structure S5E1-1 and was in line with the southern-most end of Sacbe 4 in Group A (Figure 148). The purpose of Operation 17 was to explore the various construction phases of the Group A plaza near Structure S5E1-1. This unit was too far away from the *sacbe* to yield any data pertaining to the *sacbe*. However, information relating to dates and construction phases of the plaza was obtained by excavating this unit.

Various disturbances have taken place over the years in the Group A plaza. For example, the existence of modern trash located around the cut stones situated on the surface of the plaza confirms that people have been utilizing the cut stones in the immediate vicinity as seats and benches during various mealtimes. Large trees and their associated roots cover the plaza surface as well as the nearby structures and they compromise the integrity of possible floor levels and the architecture.

The area in which Operation 17 was going to be located was cleaned of vegetation and modern trash before a 2 x 2 m unit was set up. A photo was taken at ground surface. Yo'okop's Operation 17, Level 1, Lot 1 consisted of surface sediments, tree roots, and collapse. The cut stones and collapse were mapped before being removed from the unit so that any cut stones that were removed could be placed in the correct location after backfilling the unit. The excavation of the surface sediments consisted of removing roots that ranged in size from fine to coarse and some collapse that was sitting on the surface while other cut stones or collapse that lie deeper in the sediments were left in place. The unit was excavated to the bottom of the collapse because of the assumption that a floor may be at that same elevation. Ceramics recovered from this level date to the Late Classic period but 11 ceramics were unidentifiable due to erosion. Gravels, small cobbles, and some broken pieces of *sascab* were observed at 5 cm in depth so the level was changed to Level 2, Lot 1.

Floor 1 within Operation 17 consisted of the excavation of Level 2, Lot 1 and Level 3, Lot 1. Level 2, Lot 1 involved the excavation of sediments that had accumulated around and under the bases of cut stones and collapse found at a depth of 40 cm. The excavation of Level 2, Lot 1 extended to 44 cm in depth before the excavator decided to change to Level 3, Lot 1. The level was changed due to increased gravel and cobble content associated with construction materials of a degraded floor. It was only after completion of the excavation of Operation 17, and during the drawing of the unit profiles, that Level 2, Lot 1 and Level 3, Lot 1 was determined to be located within the same floor level instead of two separate floors. Ceramics recovered within Level 2, Lot 1 and Level 3, Lot 1 date to the Terminal Classic. A second floor was located below Level 3, Lot 1 at 77 cm in depth. This floor was in good condition and made of a thick layer of *sascab*. It was decided that each construction phase associated with floor 2 would be excavated in different lots. The level was changed to Level 4, Lot 1 at the *sascab*.

Operation 17, Level 4, Lot 1 consisted of the excavation of *sascab* from Floor 2. The elevation of Level 4, Lot 1 was 86 cm in depth. Level 4, Lot 2 consisted of the removal of gravels and fist-sized cobbles. Level 4, Lot 3, consisted of medium construction fill cobbles and small boulders that averaged in size 43 cm wide x 27 cm in length. A thin layer of *sascab*

lay under the bottom of the small boulders and it was noted that this was probably due to the erosion of *sascab* from Level 4, Lot 1 settling down between the cobbles and boulders to form a pseudo-floor. In any case, the level was changed to Level 5, Lot 1.

Operation 17, Level 5, Lot 1 involved the excavation of a *sascab* layer that was fine and chalk like in consistency. Although, there were no gravels or cobbles that would be consistent with the construction of a floor, a discussion as to whether or not the *sascab* at this elevation was a floor determined that we would in fact treat this level as a floor. Operation 17, Floor 3 was different from the floors above it because this floor was sitting below construction fill boulders and right on top of soils, know to locals as chac luum, that are always associated with bedrock. Level 5, Lot 1 had a total of 314 ceramic sherds, all of which dated within the Early Classic period. Operation 17 was now at an elevation 150 cm in depth. When the *sascab* was excavated, screened, and the presence of chac luum soils was visible, the level was changed to Level 6, Lot 1.

Operation 17, Level 6, Lot 1 consisted of the excavation and screening of chac luum soils. Several medium to large boulders were located in the southern portion of unit. These boulders were left in place while the remaining soil was excavated down to bedrock. As it turns out, the boulders were sitting on bedrock. Bedrock in the Operation 17 test unit sloped from north to south. The medium and large boulders that were located in the southern portion of Operation 17 were most likely placed there to compensate for the slope when constructing the platform for the plaza (Figure 156). Several large ceramic sherds were collected around the large boulders; one that had broken into 5 pieces but was still lying on the rock was bagged separately so as to keep the 5 pieces together. One projectile point was recovered from the bedrock in the southeastern portion of the Operation 17 test unit. The projectile point was too large to be an arrowhead but could possibly be a part of a spear. It is made of a sugary chert with the Munsell color 7.5YR 8/4 (pink) and is broken at the distal end of the point. It is impossible to tell how big the projectile point actually was due to it being broken but the proximal piece is 32 mm wide x 49 mm long x 20 mm thick. No charcoal or other lithic flakes or tools were found in association with this projectile point but there were 218 ceramics recovered within Level 6, Lot 1. All but two of these ceramic sherds date within the Early Classic period. Two Muna Slate sherds date within the Terminal Classic period. It seems that Operation 17, Level 6, Lot 1 had some post depositional mixing because both floors 2 and 3 located above Level 6, Lot 1 dated to the Early Classic period. This post depositional mixing may have occurred while excavators climbed in and out of the test unit to take photos or elevations.

Soils in Level 1, Lot 1, Level 2, Lot 1 and Level 3, Lot 1 consisted of dark brown (10YR 3/3) sandy loam. Soil in Level 5, Lot 1 consisted of very dark brown (10YR 2/2) sandy loam and in Level 6, Lot 1 soil was dark reddish brown (5YR 3/3). The soil texture and consistency did not change throughout the Operation 17 test unit. There were no mottles. Soil structure was structureless forming no distinct peds and was

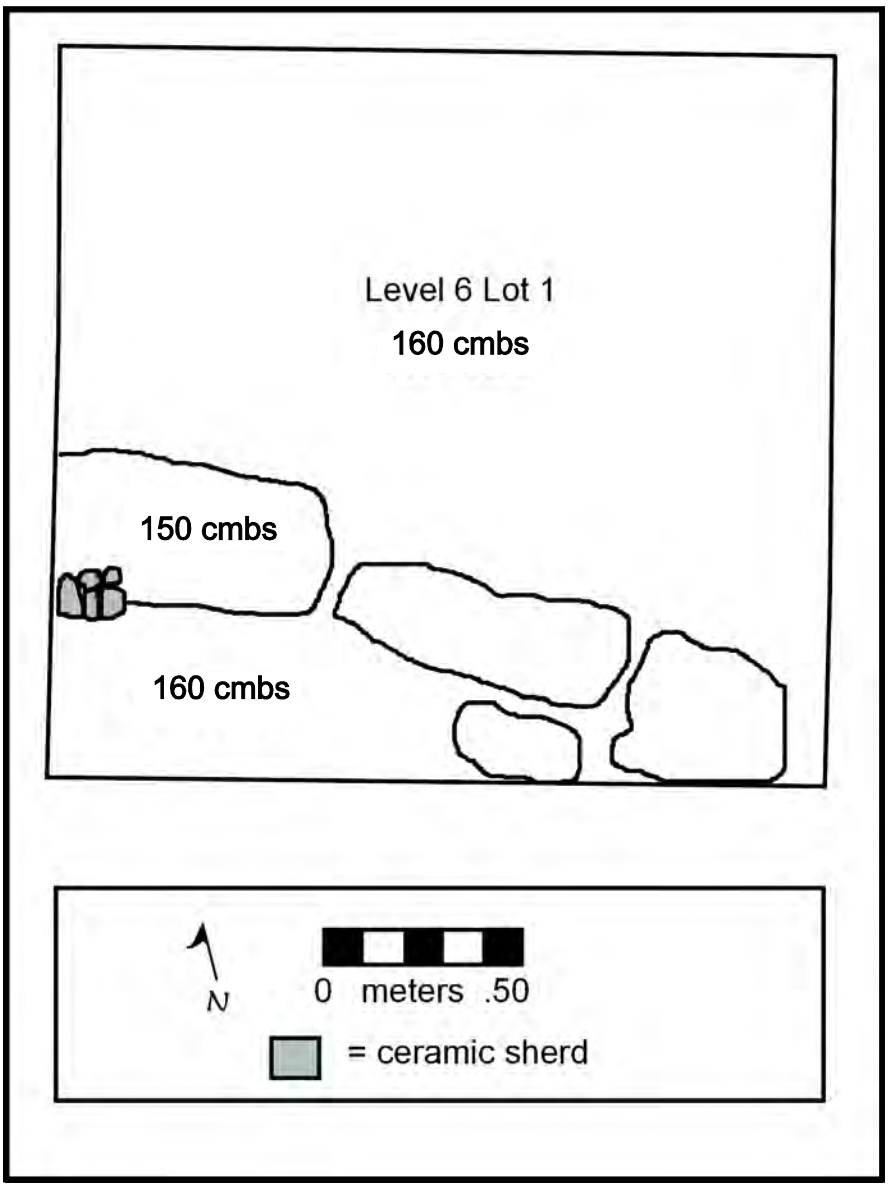


Figure 156. Yo'okop, Operation 17, Level 6, Lot 1 Plan Map

single-grained. Soil consistency when dry was loose, when moist was friable, and when wet, soil consistence was nonsticky and nonplastic. Many fine to medium roots were located throughout Operation 17 but these decreased with depth. Operation 17 had 3 floor levels within the test unit (Figure 157). Floor 1, located at 15 cm in depth, did not have a sealed *sascab* surface but there were remnants of broken *sascab* along with gravels and small cobbles which is consistent with the same type of gravels and cobbles usually associated with the construction of floors. Floor 2, located at 27 cm in depth, had a sealed *sascab* surface underlain with gravel and cobbles with a medium to large boulder dry core fill beneath them. This type of construction is typically found in the construction of platforms and floors found in the area. Although Floor 2 had a clear horizon boundary and a typical floor, there was still some debate as to whether or not the *sascab* layer found at 120 cm in depth was a third floor or just remnants of eroding *sascab* that had trickled down through the boulders from Floor 2. The presence of a fine, chalky, *sascab* layer could indicate a floor built right on top of the *chac luum* sediments but it is more likely to be eroding *sascab* from floor 2. Excavating units adjacent to Operation 17 could answer that question in a future field season.

Disturbances on the surface of the area around and within Operation 17 were minimal. There was some charcoal found in Operation 17, Level 5, Lot 1. This was attributed to a root burn from nearby trees. Trees and their root systems contributed to most of the disturbance within the test unit, whereas modern trash and the moving of collapse were the extent of disturbance on surface level areas. The public had clearly used the area in very recent months for eating various meals.

Gravel content was low in the soil matrix but picked up when associated with flooring events. In levels where there were no floors, gravels were subangular in shape and ranged in size from granules to small cobbles. The approximate percentage of gravels within the soil was 20 percent. In levels where there were floors, gravel percentages increased exponentially to as high as 75-80 percent. These gravels were also subangular to subrounded and ranged in size between pebbles and medium sized boulders. The increase in gravels did not cause any post depositional mixing of artifacts even though the gravel content increased when in association with flooring events. Operation 17 was terminated at bedrock (Figure 158).

In conclusion, the excavation of Operation 17 test unit did yield some information regarding plaza construction phases. The surface of bedrock most likely had earlier living surfaces but sometime around the Early Classic a floor made of *sascab* was created. There are several Early Classic construction phases within the Operation 17 test unit. The first possible floor which is associated with the Early Classic may be a natural floor created by the erosion of the *sascab* floor from above. There is no construction fill associated with this floor except for several medium boulders which were located along the southern edge of the test unit. These boulders were placed in this position to even out bedrock that slopes to the north but it is unclear as to whether or not they continue beyond the boundaries of Operation 17. The second Early Classic floor which consists of *sascab* underlain by construction fill made up of cobbles and small boulders lies above the first *sascab* floor. Finally, a third construction phase took place during the Terminal Classic period. The Terminal Classic floor was near ground

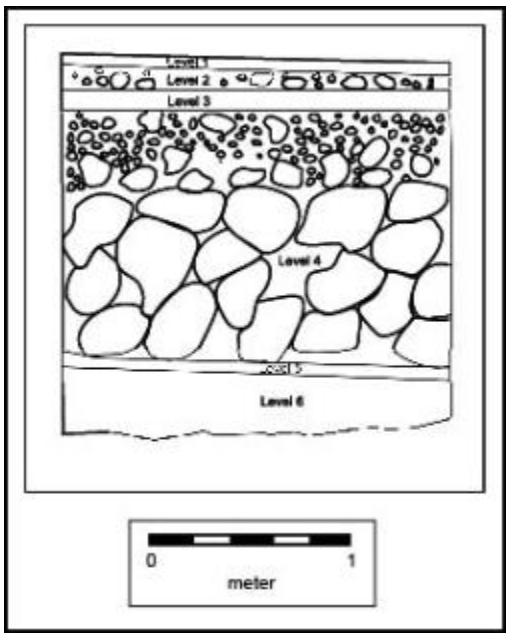


Figure 157. Yo'okop, Operation 17, East Profile

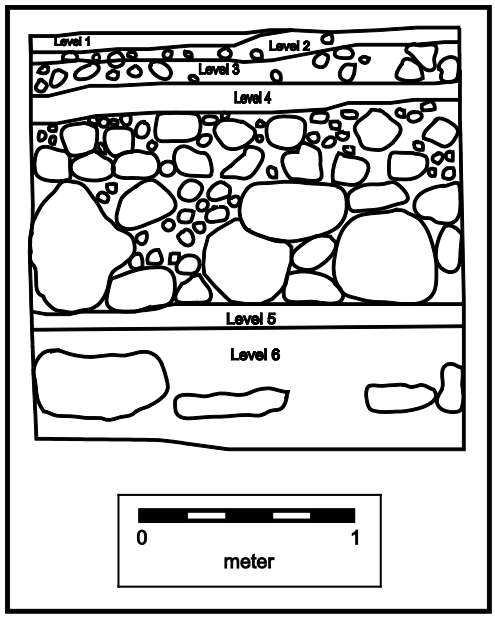


Figure 158. Yo'okop, Operation 17, South Profile

surface so the *sascab* was no longer present. The only remaining remnants of the Terminal Classic floor was some gravels and cobbles associated with construction fill.

Part 2: Saban *Ejido*

Chapter 21: Yo'okop, Operation 18

Michael Bradford and Justine M. Shaw

Yo'okop Operation 18 was a 2x2-m test pit located to the north of Structure S4W2-1, in the plaza in which Sacbe 3 terminates at Group A, beyond where any of the *sacbe*'s wall lines were visible (Figure 148). It was designed to obtain materials that might date the causeway, as well as to investigate any occupation that might predate its construction. The surface of the excavation area was quite flat prior to excavation, only varying by about 2cm between its corners and center.

Once vegetation was removed from the surface of the unit, a reddish black (2.5YR 2.5/1) sediment with roots and rootlets was exposed, barely covering cobbles and gravel that composed the subfloor of the plaza surface. Although relatively little sediment was present between the rocks, apparently composed only of that that had formed since the area's abandonment, 2-3 sherds were present in each bucketful of sediment and gravel once the larger stones had been removed. Rocks larger than 30cm began at about 10-20 cm below the surface. Level 1, Lot 1 dated to the Terminal Classic based upon its ceramic content. As bedrock began to appear at 36 cm below the surface in the northeastern corner and through the north central edge of the unit, it was apparent that this plaza leveling to form the *sacbe*'s terminus took place as a single episode, without any prior plaza surface having been present.

At about 60 cm below the surface, in the portion of the unit not yet covered by bedrock, a redder (5YR 3/4 dark reddish brown) sediment began to appear. At this point, a new lot was begun (Level 1, Lot 2; Figure 159). Although it was mixed with Level 1, Lot 1 to some degree due to an inability to keep the loose, dry sediment from sifting through the rocks protruding between both lots, it did contain fewer ceramics than the first lot. In addition, the unit became full of large- and medium-sized rocks and the soil appeared to become slightly mixed with *chac lu'um*. Soil in Lot 2 consisted of 7.5YR 2.5/3 very dark brown silty clay with moderate to heavy compaction. The level contained some mottling with 2.5YR 3/4 dark reddish brown *chac lu'um* silty clay. Bedrock was present in much of the unit at this depth, particularly in the northwest. The large and medium-sized rocks are without form and seem to represent a single fill episode directly on top of the bedrock to build up and/or level off the area. There was no floor present on top of the fill episode in the unit. Lot 2 was terminated when the soil had transitioned to a uniform *chac lu'um*. The average thickness of the level in the southeast was 75 cm, though this was much less in areas of the unit where bedrock was present. The level began at an average depth of 25 cm below ground surface (cmbgs). The level was terminated at an average depth of 100 cmbgs in the southeast; however, the depth of the level varied greatly in other areas of the unit where there was bedrock. Artifact density in the level was low and consisted of eight ceramic sherds. Identifiable ceramics consisted

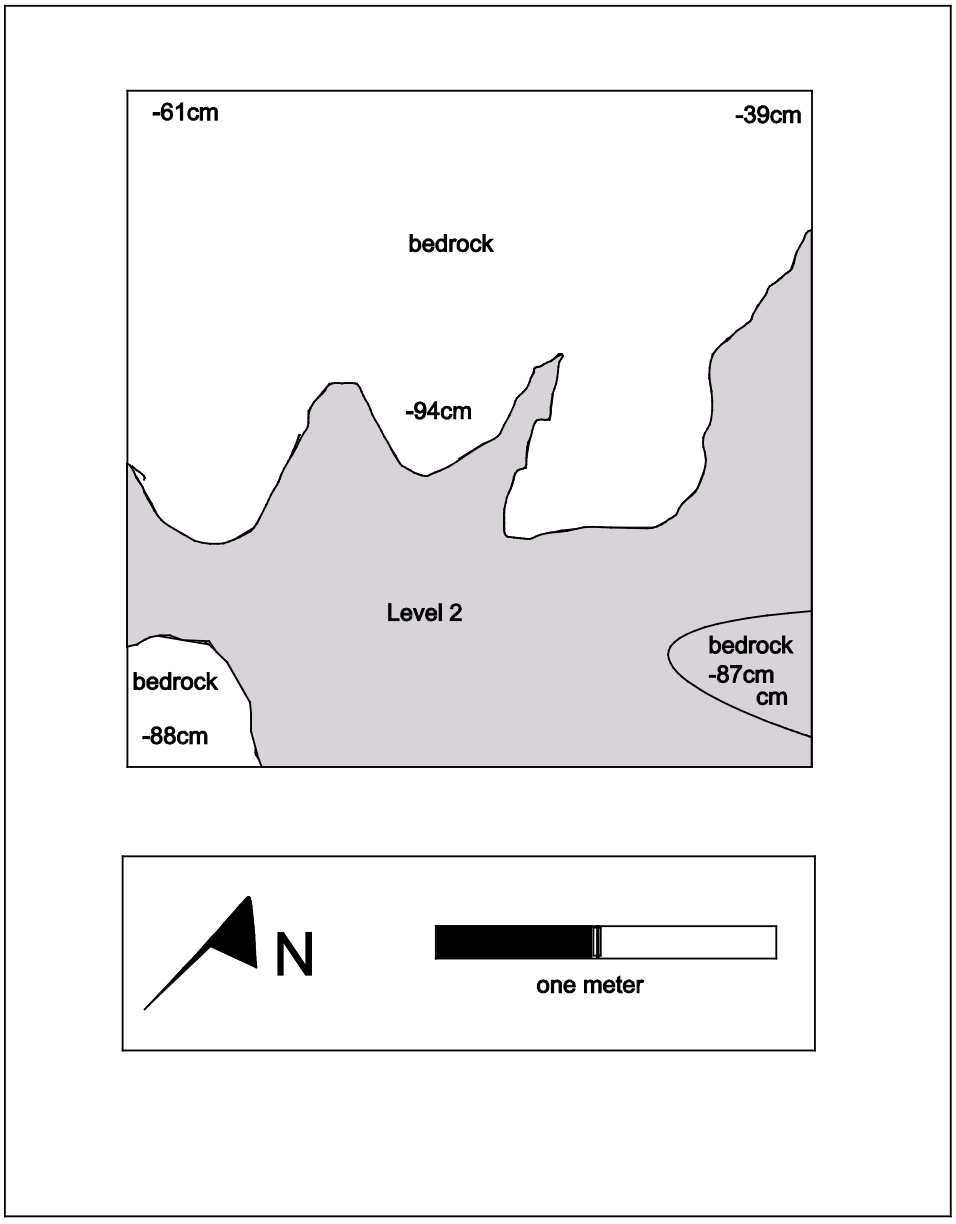


Figure 159. Yo'okop, Operation 18, Level 1, Lot 2 and Level 2 Plan

of two Sierra Red sherds, one Tumben Incised sherd, and one Dzudzuquil Cream to Buff sherd. The Sierra Red ceramics belong to the Late Formative Period, and the Tumben Incised and Dzudzuquil Cream to Buff ceramic belong to the Middle Formative Period. However, these ceramics were recovered from a highly mixed context consisting of a layer of fill that was most likely deposited much later in time.

Excavation of Level 2, Lot 1 began at the transition to the 2.5YR 3/4 dark reddish brown silty clay *chac lu'um* soil horizon, which was highly compacted (Figures 160 and 161). Excavation had been terminated in much of the unit in the previous level upon reaching bedrock. The *chac lu'um* soil horizon to be excavated in this level was present in approximately half of the of the 2 x 2 m unit, particularly in the southeast portion. The level was started at an average depth of 100 cmbgs and was terminated upon reaching bedrock at an average depth of 130 cmbgs in the southeast, though this was highly variable across the unit due to the uneven bedrock. The level had an average thickness of 30 cm. The level contained some construction fill and loose rocks. Level 2, Lot 1 artifacts consisted of seven ceramic sherds. Identifiable ceramics consisted of one Chum Unslipped sherd, one Lucha Incised sherd, and one Balanza Black sherd. The Chum Unslipped sherd belongs to the Terminal Classic Period. The Lucha and Balanza Black sherds are associated with the Early Classic Period. The level is considered to date to the Terminal Classic Period, based upon the most recent identifiable ceramic sherd. It must be noted that this sherd may also be from a poor context, as the level contained some amount of construction fill. However, the presence of the Chum Unslipped sherd in the level suggests that the construction fill episode mainly confined to Level 1 did not take place earlier than the Terminal Classic Period.

Upon completion of excavation of Operation 18, all four walls were cleaned and photographed. The southeast and northeast walls were profiled. A plan map showing the variations in depth of the base of excavation at bedrock was drawn. Modern material was placed at the maximum depth of the excavation to serve as a marker for future reference. All excavated soil and rocks were backfilled into the test unit, and a backfilled photograph was taken.

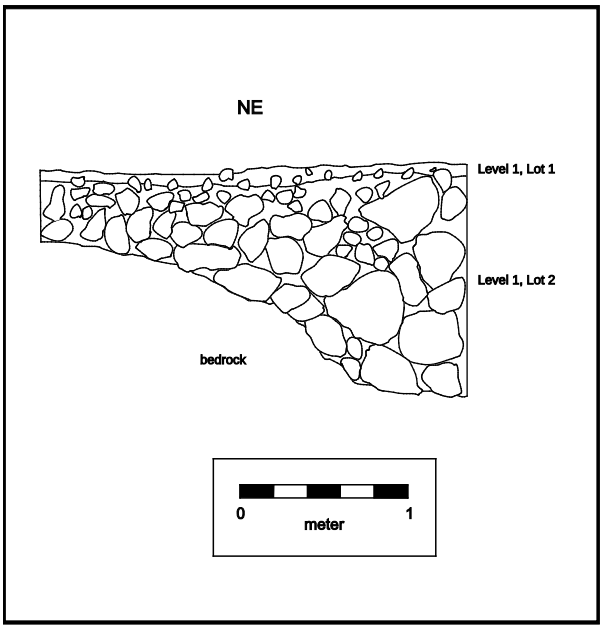


Figure 160. Yo'okop, Operation 18, Northeast Profile

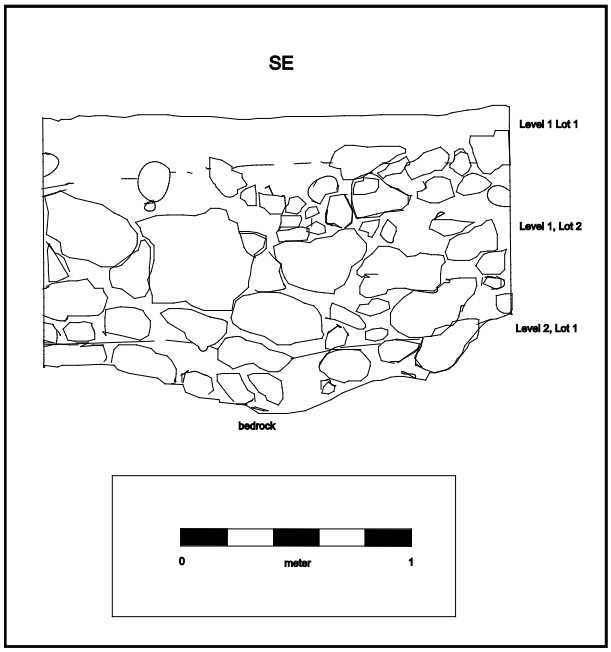


Figure 161. Yo'okop, Operation 18, Southeast Profile

Part 2: Saban *Ejido*

Chapter 22: Yo'okop, Operation 19

Michael Bradford

Operation 19, a 2 x 2 m test unit, was placed in the northern end of Yo'okop's Group B (Figure 162). The unit is located near the southern terminus of Sacbe 2, which leads over one km northwest from the northern acropolis of Group B to Group C. Operation 19 is located approximately 7 m east of the base of collapse of Structure N8W1-2. It is also located 2 m west of a possible defensive wall, which could be either of Prehispanic origin or related to the Mexican Caste War during the 19th or early 20th century. The possible wall could also be the result of ground-disturbing activities associated with heavy machinery used for logging in the 1970s. The purpose of the test unit was to provide a better understanding of the various construction phases of the northern end of the Group B acropolis plaza near Structure N8W1-2, the southern terminus of Sacbe 2, and the possible defensive wall. It was also hoped that cultural material recovered from the unit, such as ceramic material from sealed contexts, could provide an approximate date for construction.

The area between Structure N8W1-2 and the possible defensive wall where the test pit was placed was located on a relatively high downward slope to the north and east. There were no visible rocks or architectural features on the surface that would be affected by the excavation. Methodology of Operation 19 consisted of a combination of strategies, including excavation according to cultural and natural stratigraphic levels. Excavation was conducted by trowel and hand-pick. All excavated soil was screened through 1-cm mesh. Artifacts were bagged separately according to level, lot, and artifact type. All soil was replaced upon termination of the test pit. The area was cleared of vegetation and the 2 x 2 m test unit was set-up.

Level 1, Lot 1 was excavated to a depth where there was a noticeable change in rock content across the entire unit floor. Soil in Lot 1 consisted of 5YR 2.5/2 dark reddish brown friable silt loam. The level was an average of 15 cm thick. Loose rocks and a moderate amount of root disturbance were present. Lithic material recovered from the level consisted of one chalcedony scraper and one chalcedony bipolar core. The scraper was 10YR 5/2 grayish brown in color and measured 14 mm in width, 33 mm in length, and 6 mm in thickness. The bipolar core was 10YR 6/4 light yellowish brown in color and measured 21 mm in width, 29 mm in length, and 12 mm in thickness. Ceramics consisted of a total of 84 sherds, of which 40 were identifiable. Identified ceramic sherds belonging to the Termnal Classic included 18 Muna Slate, eight Yokat Striated var. Yokat, four Teabo Red, one Tekit Incised, and one Becal Incised. One Arena Red sherd belonging to the Late Classic was recovered. One Dos Arroyos Orange Polychrome sherd dating to the Early Classic was found in the level. One Chancenote Unslipped sherd belonging to the Late Formative was recovered. Middle Formative ceramic sherds included one Dzudzuquil Cream to Buff, one

Figure 162. Yo'okop, Group B, 2014 Test Pit Locations

Desvario Chamfered, two Nacolal Incised, and one Chunhinta Black v. Ucu. The level appears to have a high degree of mixing and disturbance, and is appears to be associated with a collapse episode. The level is considered to date at the earliest to the Terminal Classic, based on the most recent ceramics recovered. There is however, also the possibility that the soil in the level has been relocated and/or disturbed to by the recent logging activity in the area.

Level 1, Lot 2 was started at an average depth of 15 cm below ground surface (cmbgs), though there was some variation in across the unit. Excavation continued to follow the natural slope of the landform. Soil in Lot 2 had transitioned to 5YR 3/2 reddish gray friable silt loam. Some mottling with 5YR 2.5/2 dark reddish brown and 5YR 3/3 dark reddish brown was present. The level had moderate root disturbance. Excavation of Lot 2 proceeded in small increments in order to better view any possible changes in the unit floor. Large rocks were present in the west half of the unit. Smaller rocks that were present in the east half became more compact. No stucco was observed in the level. Lot 2 was terminated at this depth, at an average depth of 25 cmbgs and an average thickness of 10 cm, though there was much variation across the unit. Thirty-eight ceramic sherds were recovered from the level. Identifiable sherds from the Terminal Classic consisted of three Muna Slate, one Teabo Red, and one Becal Incised. Ceramic sherds belonging to the Early Classic included three Dos Arroyos Orange Polychrome, one San Blas Red on Orange, and one Xanaba Red. One Sierra Red sherd dating to the Late Formative was also recovered. Level 1, Lot 2 is considered to date to the Terminal Classic based on the most recent ceramics. However, the level appears to be part of a collapse episode, and it is unclear to what degree it may have been disturbed.

It was decided that excavation of Level 1, Lot 3 was to only include the east portion of the unit that contained the smaller rocks (Figure 163). The western half, approximately, of the unit contained larger rocks that were thought to possibly have been part of a collapse episode and were left in place. The east side of the unit was excavated as Lot 3 in order to determine if the possible collapse continued to the east with depth and the downward slope. Soil consisted of 5YR 3/3 dark reddish brown friable silt loam. The level contained moderate root disturbance. Larger rocks were exposed with depth during excavation of Lot 3. The larger rocks appear to have been part of the same collapse episode as those encountered in the western half of the unit in Lot 2, which may be the result of collapse from Structure N8W1-2. Lot 3 was terminated at this depth, which was an average of 40 cmbgs. The level had an average thickness 20 cm. Due to slope, average thickness and depth below ground surface varied across the unit. Artifacts recovered from Level 1, Lot 3 included 16 ceramic sherds. Identifiable ceramics from the Terminal Classic consisted of two Muna Slate sherds and one Teabo Red sherd. Early Classic ceramic sherds included two Dos Arroyos Orange Polychrome and one Caucel Trickel on Red. Based on the most recent ceramics, Lot 3 is considered to be associated with the Terminal Classic Period, although the level likely consists of a disturbed, mixed context due to collapse.

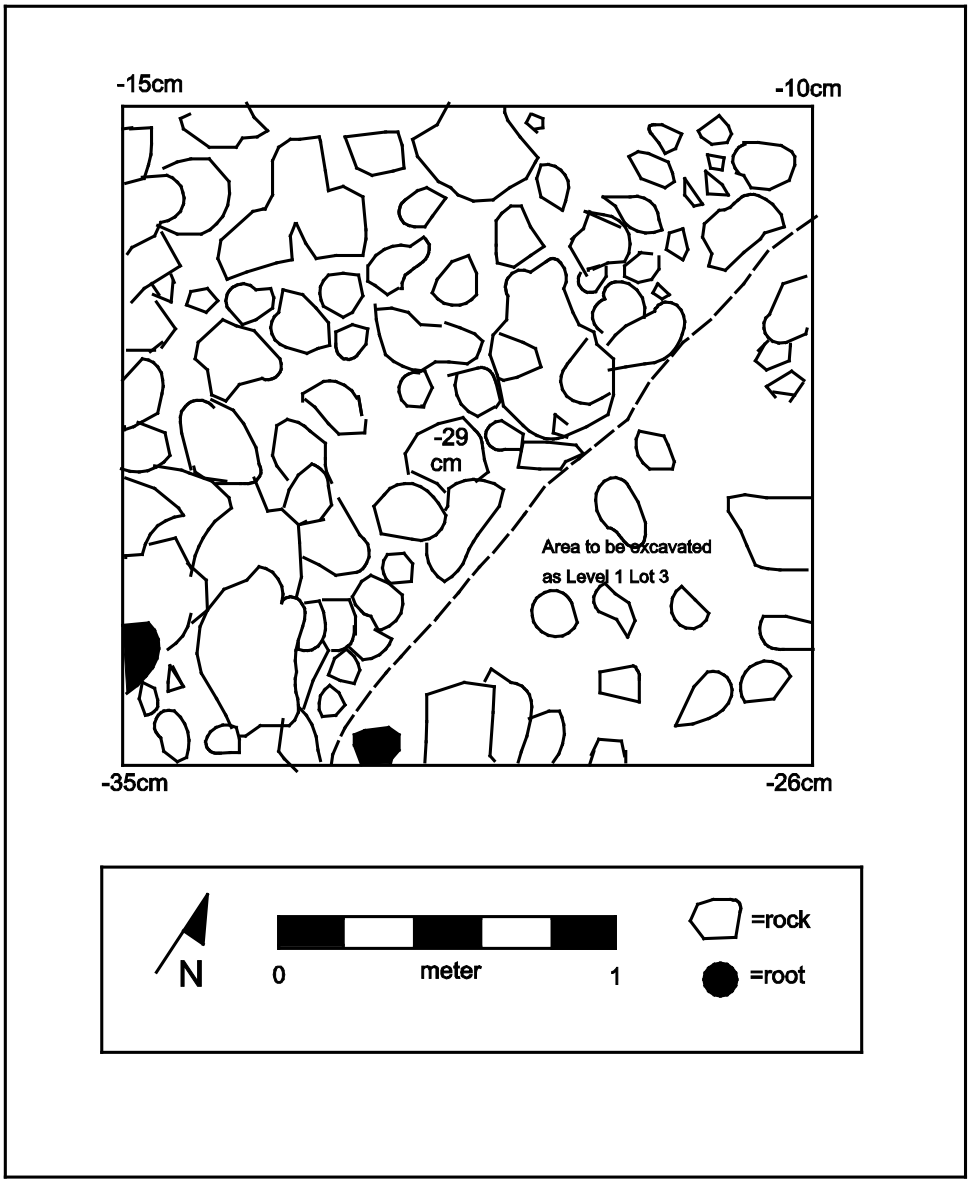


Figure 163. Yo'okop, Operation 19, Level 1, Lots 2 and 3, Plan

Excavation of Level 1, Lot 4 began at the base of Lot 2 in the west half of the unit and at the base of Lot 3 in the east half. Due to slope, there was a large variation in the starting depth across the unit, ranging from approximately 10 to 50 cmbgs. Level 1, Lot 4's excavation was started by removing collapse, consisting of large and medium-sized rocks, from the unit. Soil in Lot 4 was 5YR 3/3 dark reddish brown friable silt loam, transitioning with depth to 5YR 4/4 reddish brown friable silt loam. Root disturbance continued to be moderate throughout the unit. A large, decorated ceramic sherd with part of its base and rim intact was recovered *in situ* in the base of the level just under the layer of collapse debris. The sherd dates to the Middle Formative Period. However, it does not appear from be associated with an intact soil horizon, as ceramics from later time periods were also present in and below the level. The sherd seems to be associated with a collapse event. Lot 4 was terminated after most of the collapse had been removed. Some stucco was noted to have accumulated under the collapse debris. Bedrock was present in nearly half of the unit at the base of Lot 4, particularly in the northwest. The level was an average of 10 cm thick, though this varied due to slope and the presence of bedrock. Artifacts consisted of a total of 33 ceramic sherds. Ceramics belonging to the Late Classic included five Muna Slate sherds of the Late Classic type. Sherds associated with the Early Classic Period included nine Xanaba Red, two Dos Arroyos Orange Polychrome, one Aguila Orange, and one Balanza Black. One Laguna Verde Incised sherd belonging to the Late Formative was recovered. Ceramics belong to the Middle Formative consisted of three Guitarra Incised sherds, one Chunhinta Black v. Ucu sherd, and one Petjal Red on Black and Cream sherd. Level 1, Lot 4 is considered to date to the Terminal Classic Period, based on the more recent ceramics that were later recovered at depths below Lot 4. The presence of a variety of earlier ceramic types suggests a certain amount of mixing has occurred, which was most likely associated with a collapse event.

Level 1, Lot 5's excavation was started after most of the collapse debris had been removed from the unit. The primary soil of the level remained a 5YR 4/4 reddish brown friable silt loam. The south corner of the unit became mottled with 5YR 4/4 reddish brown silt loam, as well as stucco and *sascab* that was 10YR 8/1 white in color. The *sascab* in the south corner became very compact and was determined to be a floor. Loose rocks that were present in Lot 5 directly above the floor appear to be the result of a fill episode to level-off and/or raise the area to a higher level. Two large rocks located in the southwest wall near the south corner of the unit may be part of a structure, as they appear to have form and seem to be aligned with each other. The test unit may clip the north end of a raised platform area next to Structure N8W1-2. Roots and loose rocks along the walls were removed when possible in order to have a better view of the unit wall profiles. Lot 5 was excavated to the depth of encountering bedrock, the *sascab* floor, or *chac lu'um* soil, where the level was terminated. *Chac lu'um* soil was present at base of level in a small area on the southeast side of the unit. Level 1, Lot 5 had an average thickness of 25 cm and an average final depth of 80 cmbgs, though this was highly variable across the unit. Artifacts from the level consisted of a total of 14 ceramic sherds. Identifiable sherds belonging to the Late Classic consisted of two Saxchre Orange Polychrome. Identifiable sherds belonging to the Early Classic included two Dos Arroyos Orange Polychrome, two Yaxcaba Striated, two Xanaba Red, and one Lucha Incised. Level 1, Lot 5 is interpreted as being a fill layer.

Level 1, Lot 6 consisted of excavation of the *sascab* floor that was present in the southern portion of the unit. The level consisted of a 10YR 8/1 white compact to very compact loamy silt *sascab*, mottled with 5YR 5/4 reddish brown silt loam near the top of level, as well as some 7.5YR 8/2 pinkish white. The *sascab* became very compact in several areas

where it appeared to be part of the natural bedrock. The level was excavated to the natural bedrock. In two areas near the southeast wall the *saskab* floor was excavated to *chac lu'um* soil. The level was terminated at either bedrock or *chac lu'um*. Level 1, Lot 6 had an average depth of 95 cmbgs and an average thickness of 15 cm. Artifacts from Lot 6 consisted of four ceramic sherds, all of which were recovered from near the top of the *sascab* floor. The only identifiable ceramic was one Muna Slate sherd belonging to the Terminal Classic Period. This suggests that at the earliest, everything above the *sascab* floor dates to the Terminal Classic.

Level 2, Lot 1 consisted of the excavation of the *chac lu'um* soil that was present under the *sascab* floor in two areas near the southeast wall of the unit. Soil consisted of 2.5YR 3/6 dark red loamy clay *chac lu'um* that was moderately friable to compact in consistency. The level and the unit were terminated upon excavating all soil to bedrock. The level had an average thickness of 15 cm and an average depth of 110 cmbgs. Artifacts consisted of two ceramic sherds. The only ceramic that was identifiable was a Muna Slate sherd belonging to the Terminal Classic. This sherd was recovered from the soil horizon below the *sascab* floor, which dates Operation 19 to the Terminal Classic Period.

Upon completion of excavation of Operation 19, the northeast, southeast, and southwest walls were cleaned, photographed, and profiled (Figures 164 and 165). A plan map of the base of the unit showing the areas and depths of Level 2, Lot 1 was drawn. Modern material was deposited into the unit at the maximum depth of the excavation to serve as a marker for future reference. All excavated soil and rocks were backfilled into the test unit.

Operation 19 is interpreted as dating to the Terminal Classic Period, based on the Muna Slate ceramic sherds recovered from the soil under the *sascab* floor in Level 2, Lot 1 and from directly above the *sascab* floor in Level 1, Lot 6. A portion of the south end of the test unit appears to have been utilized as part of a small *sascab* quarry that was later filled in with *sascab* and leveled-off to a floor. It may have been part of a raised platform structure that seems to be present in the southwest wall in the south corner. A layer of fill, excavated as Level 1, Lot 5, appears to have been later placed over this to further raise and level-off the area. What seems to be a raised platform or plaza area is present to the south and southeast of Operation 19, to the east of Structure N8W1-2, and to the west of the possible defensive wall. The area is also near the terminus of

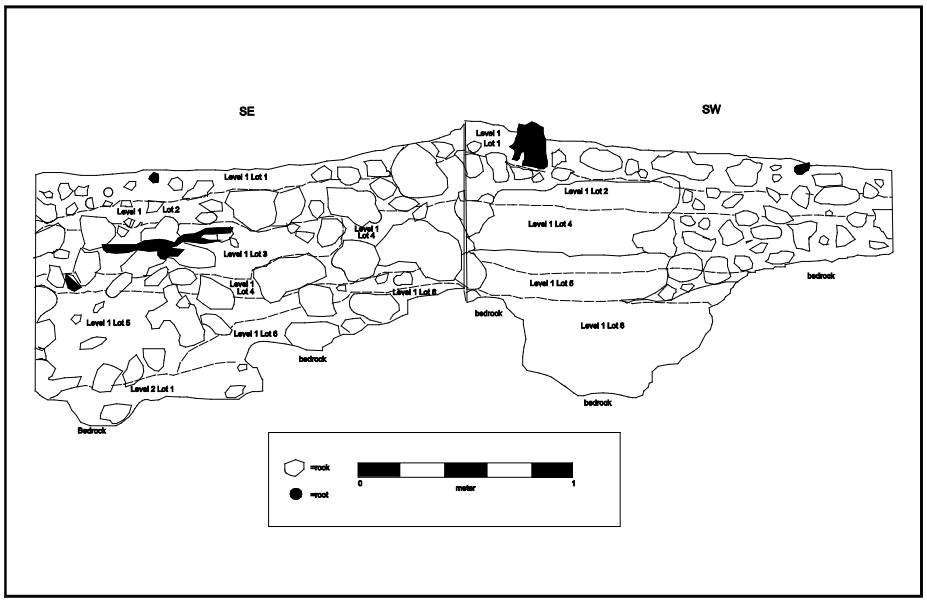


Figure 164. Yo'okop, Operation 19, Southeast and Southwest Profiles

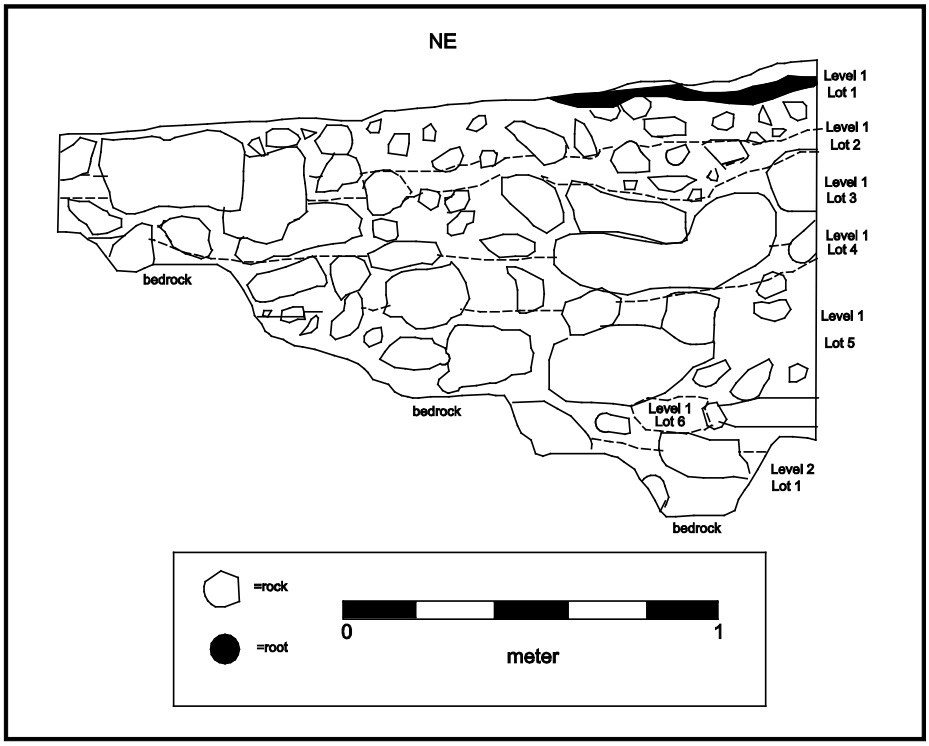


Figure 165. Yo'okop, Operation 19, Northeast Profile

Sacbe 2, which connects Yo'okop Group B with Group C. Operation 19 also appears to have a certain amount of collapse from Structure N8W1-2 on top of the fill layer. The collapse was excavated in Level 1, Lots 1 through 4.

Part 2: The *Ejido* of Saban

Chapter 23: Yo'okop, Operation 20

Alberto G. Flores Colin

This unit was located in Yo'okop's Group B, at the western extreme of Sacbe 4, next to one of the side walls of this construction (Figure 162). It was part of a sample program conducted in the terminus areas of Yo'okop's causeway system. The aim of this program was to identify a relative chronology for the *sacbeob* and their associated contexts where the constructions start/ end.

Operation 20 was a 2 x 2 m test pit, which was excavated following natural stratigraphy (Figure 166). Level 1, Lot 1 consisted of a dark brown layer (7.5YR 2/3), mixed with a few rocks (5 x 8 cm on average). While most of the sherds in this level were not identified because their poor preservation, samples that were identified were from the types Yokat Striated var. Yokat and Teabo Red, both from the Terminal Classic (see Chapter 40).

Level 1, Lot 1 ended with the discovery of a series of medium-to-large stones, which were covering the entire unit. However, the northern portion of this rocky layer showed a major concentration of large rocks (of about 30 x 40 cm), as well as a different arrangement compared to the southern side (Figure 167). For that reason, Level 2 was divided into two lots (Lot 1 and Lot 2) with the aim of having better control of these two contexts.

Level 2, Lot 1 was the southern section of the unit. It was composed of several rocks 15 x 20 cm in size, mixed with a yellowish dark brown sediment (10YR 4/3). This deposit was 15 to 18 cm in depth and, due its consistency and compaction as well as the large quantity of rocks it contained, it is probable that this layer was a subfloor, perhaps related to the last occupation of the plaza.

During excavation of Level 2, Lot 1, it was noted that the difference between the two lots continued; thus it was decided to not excavate Level 2, Lot 2, since the rocks in this area seemed to be part of an architectural feature, because the rocks were aligned and crossed the entire unit from east to west. Ceramics from this layer were few; most of them were of the type Yokat Striated var. Yokat from the Terminal Classic.

Excavation of Level 2, Lot 1 ended with the discovery (in the northern area) of the upper part of an architectural feature of Level 2, Lot 2, which was not excavated. It was designated as Feature 1 (Figure 168). This feature, at this point of the excavation, seemed to be a step or the base of a platform that predated Sacbe 4. The level concluded with the discovery of a *sascab* surface; therefore it was decided to change to a next level.

Level 3 was a *sascab* floor (Floor 1) with a rough surface. This floor was not complete in the whole unit, having missing sections in the south-center and the west area. For this reason, the excavation of Level 3 was divided into Lot 1, Lot 2 and Lot 3. Two first lots correspond to missing sections, while Lot 3 was the area that has a well- preserved surface.

Figure 166. Yo’okop, Operation 20, Surface

Figure 167. Yo’okop, Operation 20, Level 1, Lot 1

Figure 168. Yo’okop, Operation 20, Level 3, Lot 1

With the aim of not affecting the well preserved area of Level 3 (Lot 3), Lot 1 and Lot 2 were excavated first, reaching 15 cm below the interface with Level 2, at the point at which a change in the color sediment was detected. Once both lots were removed, Level 3, Lot 3 was excavated. This stratum was formed by a very pale brown sediment (10YR 7/4), mixed with a few rocks. This stratum had an average width of 2 cm, and concluded with the discovery of what seemed to be a second stucco floor.

In the north section of the unit, the area that was not excavated, Feature 1 was exposed. This feature was defined as a step attached to the side of Sacbe 4, which could have served as a formal access to the causeway (Figures 169 and 170).

In regard to ceramics in Level 3, Lot 1, a few fragments from the Terminal Classic were located, while in Level 3, Lot 2, two fragments from the Late and Early Classic were identified. However, these lots seemed to be caused by intrusions of roots or another animal; therefore they were considered as mixed contexts (Figure 171). On the other hand, although most of the ceramics located in this Level 3, Lot 3 were from the Early Classic, sherds of types Encanto Estriated var. Sacna and Arena Red indicate that Level 3 dates back to the Late Classic (see Chapter 40).

The next level, Level 4, had a large area with another plaster floor (Floor 2), which was better preserved than the last, although it had an intrusion on the west side, that was designated as Level 3, Lot 2. Level 4, Lot 1 corresponded to the best preserved area of the floor. This layer was formed by mixing with a very pale brown soil (10YR 7/3) and *sascab*, as well as a few stones. It is noteworthy that in Level 4, Lot 2 did not include any sherds, while within Level 4, Lot 1 several samples of Early Classic types (Encanto Striated v. Sacna and Arena Red) were located.

Level 4 had an average depth of 18 cm. It was within Level 4 that the base of the step was located (Feature 1) and it was noted that Floor 2 was placed at the same level as the stones that formed the base of said feature (Figure 172). Therefore, Floor 2 would be related to the period of the occupation of the plaza. Once uncovered in its entirety, it was found that the Feature 1 measures 90 cm wide and about 50 cm in height. This feature was composed of a line of stones that run parallel to the wall of the causeway, forming a step that perhaps served as formal access to this pathway (Figure 173).

Similarly, once Feature 1 was completely exposed, it could easily discerned that many of the stones at its top were not part of it, but came from the collapse of nearby structures, while others appear to have been taken from the walls of Sacbe 4, perhaps with the intention of being used in the construction of a nearby foundation brace.

Below Level 4, a fifth level was located. Level 5, Lot 1 consisted of a layer of a reddish-brown color (7.5YR 6/6), locally known as *chak' lu'um*, mixed with several small stones (about 5 x 8 cm on average). The excavation of this deposit ended with the discovery of bedrock in the entire unit (Figure 174).

One point worth noting at this level was the discovery of what appears to have been a foundation base that lies below the western part of the Feature 1 (Figure 174),

Figure 169. Yo’okop, Operation 20, Level 3, Feature 1 (W View)

Figure 170. Yo’okop, Operation 20, Level 3, Feature 1 (S View)

Figure 171. Yo’okop, Operation 20, Level 3, Lot 3

Figure 172. Yo’okop, Operation 20, Level 4, Lot 1

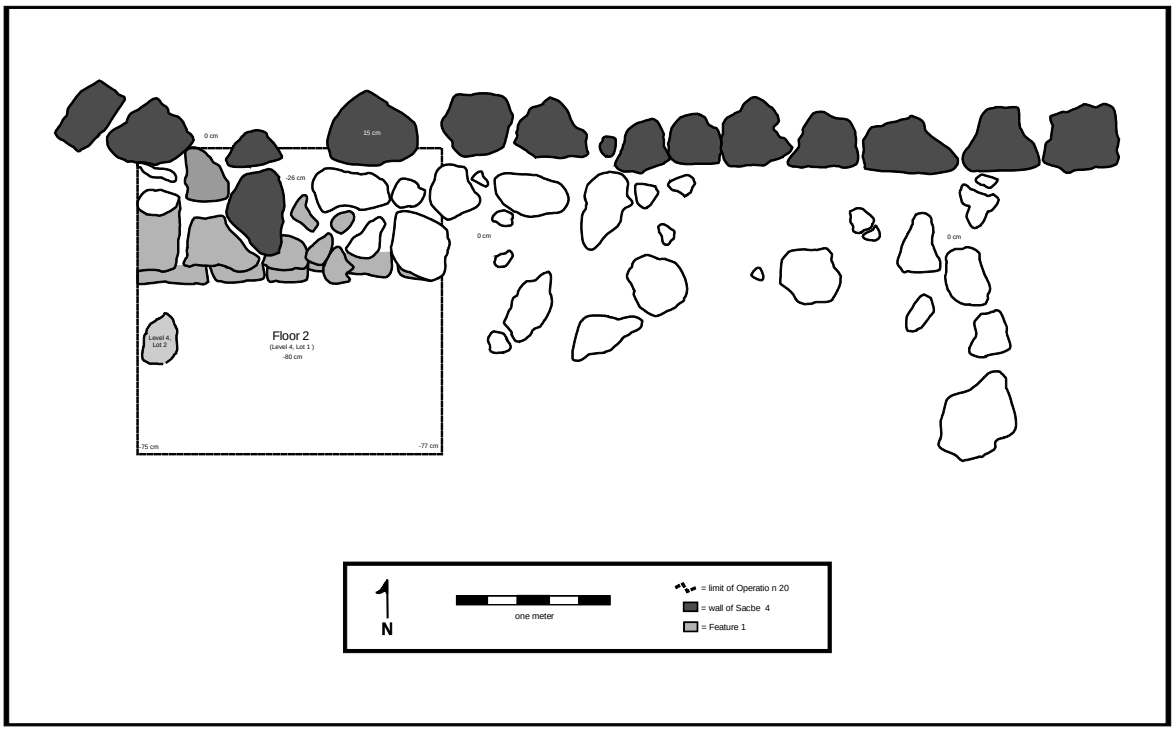


Figure 173. Yo'okop, Operation 20, Level 4, Lots 1 and 2, Plan Map

Figure 174. Yo'okop, Operation 20, Level 5, Lot 1

which seems to be part of the same construction project. Ceramics located in this last level date from the Early Classic, mostly represented by the types Xanaba Red and Yaxcaba Striated.

Once all the sediment of Level 5, Lot 1 was removed, we proceeded with the registration of the unit using drawings and photographs (Figure 175). Following this, the process of consolidation began.

Consolidation

Tasks of consolidation in the unit were carried out in Feature 1, which has been interpreted as a step to access Sacbe 4, as well as in some of the stones that were located above it. The goal of the consolidation work was to ensure the stability of all of these elements *in situ*, so that, at some future date, these could be properly restored.

The consolidation began with the removal of soil that was in the joints between the stones, as well as the detailed cleaning of all the components of Feature 1. Once this was completed, the sediment was replaced by a mixture of *sascab* lime, which was painted with local soil for a more natural finish (Figure 176).

Following this, once everything was properly recorded and consolidated, the excavation was backfilled with the same material that was extracted from it until the fill reach the original surface (Figure 177).

Interpretation

The excavation of this unit yielded very interesting results, not only the timing of the construction of this part of Group B of Yo'okop, but it also raises some questions about the very nature of Sacbe 4.

According to the stratigraphic sequence discovered in this excavation, Level 5, Lot 1 corresponds to the natural surface of the area by Early Classic times. Following this, the construction of another floor took place, Floor 2 (Level 4, Lot 1), as well as the creation of Feature 1, which seems to be part of the same construction project as Sacbe 4. If this is true, all these constructions, including the causeway, date back to the Early Classic based upon ceramic evidence.

At some point during the Late Classic, it was decided to raise the level of the plaza adjacent to Sacbe 4, creating a new surface with a stucco finish that covered almost all of Feature 1, leaving only about 15 cm of its surface exposed as a sort of low step. This new plaza surface was Floor 1 (Level 3, Lots 1, 2, and 3), the last formal level that was found in this excavation. This area appears to have been exposed to the elements for some time, as it was in an advanced degree of deterioration and had two missing sections (Level 3, Lots 1 and 2).

Following this, in the deposit labeled Level 2, Lot 1, there seems to have been an occupation surface lacking a formal floor, perhaps used when this part of the site was abandoned. This occupation occurred at some point during the Terminal Classic.

The last level, Level 1, Lot 1, contained the sediment that had accumulated since the aforementioned period to the present day, containing abundant organic matter. It is

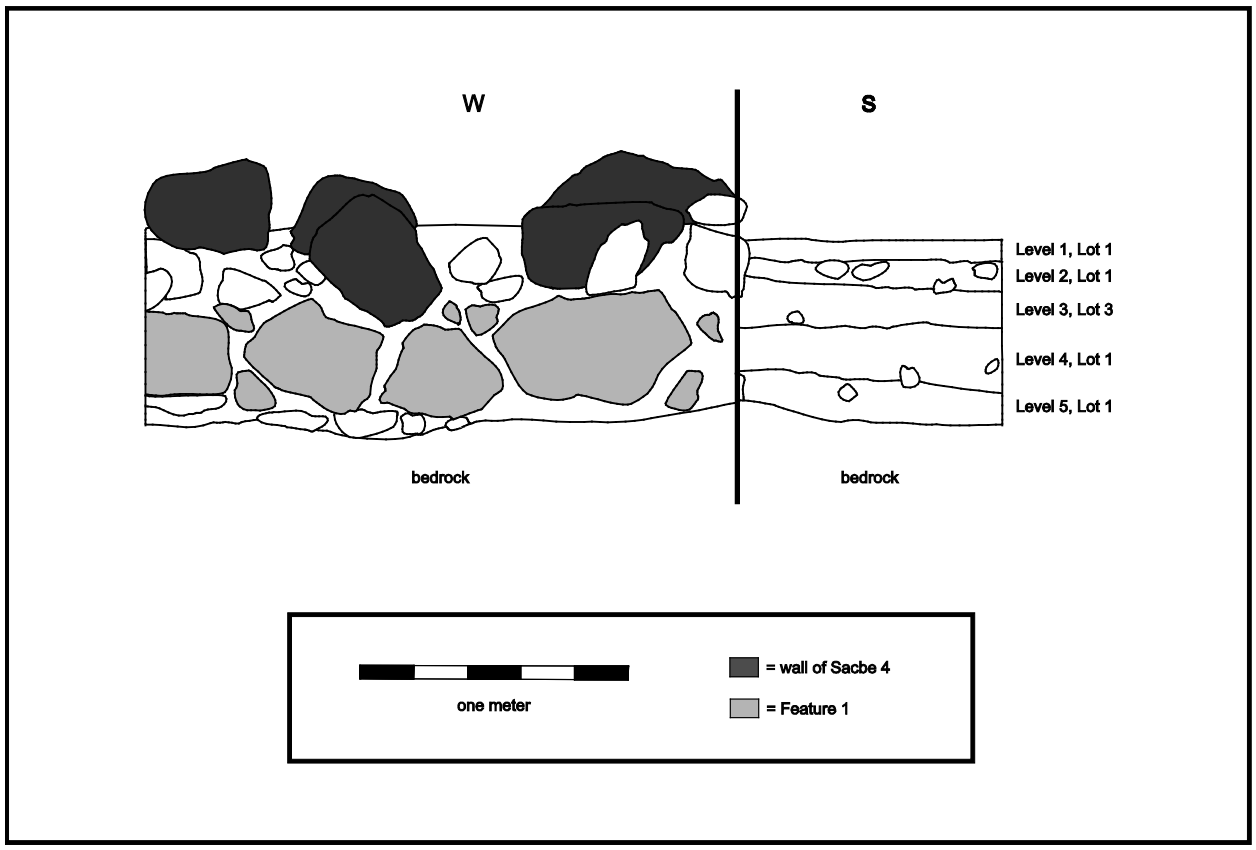


Figure 175. Yo'okop, Operation 20, West and South Profiles

Figure 176. Yo'okop, Operation 20, Consolidation

Figure 177. Yo’okop, Operation 20, Backfilled

noteworthy that, although there are some Postclassic shrines on nearby structures, no sherds from this period was found in this unit.

In addition to the construction sequence itself, this unit revealed an interesting aspect about the timing of the adjacent causeway, Sacbe 4. According to the evidence gathered in this unit, it appears that this is the only sacbe that would date from the Early Classic in Yo'okop's causeway system. While it is true that this excavation is adjacent to the causeway and does not really directly dating this construction, the discovery of Feature 1, which is attached to *sacbe* indicates that both are part of the same construction project. Based upon its stratigraphic context, the step (Feature 1) cannot occur after the construction date of Sacbe 4 (Early Classic), which reinforces the hypothesis of the date of this feature. In addition, the data provided by Operation 21 (see Chapter 24), located on the eastern edge of Sacbe 4 seems to concur with the results obtained from this excavation.

If is true that this causeway (Sacbe 4) precedes the construction of other roads that form the Yo'okop's system, then this small causeway would be the first construction exercise of such elements. In addition to representing the time of emergence of the concepts that promoted the construction of this type of element, perhaps as a result of a new stratification and/or a new social order. This is consistent with the idea that has been raised about that the small causeways that connect areas within the sites predate the largest *sacbeob*, which connect different settlements (Kurjack 1977: 225).

Another possibility is that the Sacbe 4 is not a causeway, but it is only an elongated platform. If that is true, then we have to reassess many of the assumptions we have proposed for this part of the settlement of Yo'okop. However, to fully determine the nature of Sacbe 4 it is necessary to excavate a larger section of this construction, perhaps an extensive excavation of one of its sides. With these works, in addition to consider its architecture style, we could determine whether or not if this construction is a causeway, as well as verify if the date of construction was during Early Classic. These investigations are planned to take place in future field seasons.

For now, if all the evidence found in this Operation 20 is correct, we must reformulate the hypothesis that all causeways dates back to Terminal Classic, which brings more complexity to the study of the *sacbeob* system of this settlement.

Part 2: The *Ejido* of Saban

Chapter 24: Yo'okop, Operation 21

Alberto G. Flores Colin, Justine M. Shaw and Leslie Reyes

This unit, like Operation 20 (see Chapter 23), was located at one end of Sacbe 4, the smaller causeway of the sacbe system of Yo'okop (Figure 148). As with all operations excavated this year in this settlement, the aim of this unit was to establish a relative chronology for the contexts where the causeways start/ end, in addition to obtaining information about the history of the occupation, the construction sequence, as well as the spatial and functional relationship of these areas with the causeways. In addition, the result of this work will help to indirectly establish a relative chronology for the construction of the causeways and their interaction with these spaces.

Operation 21 was a 2 x 2 m test pit, located 6 m west of Structure N6W2-9 and 2 m northwest of Structure N6W2-10 (Figure 178). The area where the unit was located was covered by secondary vegetation that has developed in a period of 15-30 years that this area has not been used for agriculture. Operation 21 was excavated following the general methodology of the project and had a total of four levels, which are described below.

Level 1, Lot 1 included only the west side of the pit, in a northwest-southeast axis in which the unit was divided. This division was due to three stones that were visible on the surface, which suggested the presence of an architectural feature, as well as the difference of 25 cm in the existing level between the southeast corner and the northwest corner.

The surface of this level had a blackish color (7.5 YR 2.5 / 1), which gradually became into a darker gray (7.5 YR 3/1). Its texture was silty, with a loose consistency when dry, while becoming plastic and sticky when absorbing water. Ceramics located in this deposit were from the Terminal Classic. During the removal of this sediment, it became apparent that the three stones were part from the collapse of Structure N6W2-9.

After removing 7 cm of this soil, and leaving the above-mentioned stones in their original position, a new lot emerged (Figure 179). Level 1, Lot 2 had a depth of 10 cm and consisted of a dark gray sediment (7.5 YR 4/1) mixed with a few stones. Although there were sherds from earlier times, examples of the types Muna Slate and Yokat Striated var. Yokat indicate that this deposit dates from the Terminal Classic. The excavation of Level 1, Lot 2 ended with the discovery of a layer of collapse that was distributed throughout the unit.

This collapse was designated as Level 2, Lot 1, and it consisted of a graying sediment, the product of the remnants of stucco that agglutinated once these stones collapsed (Figures 180 and 181). Pottery from this level dates back to the Early Classic, although a sherd of the Teabo Red from Terminal Classic was located.

Figure 178. Yo’okop, Operation 21, Surface

Figure 179. Yo’okop, Operation 21, Level 1, Lot 2 (Before)

Figure 180. Yo'okop, Operation 21, Level 1-2 Interface, Lot 1

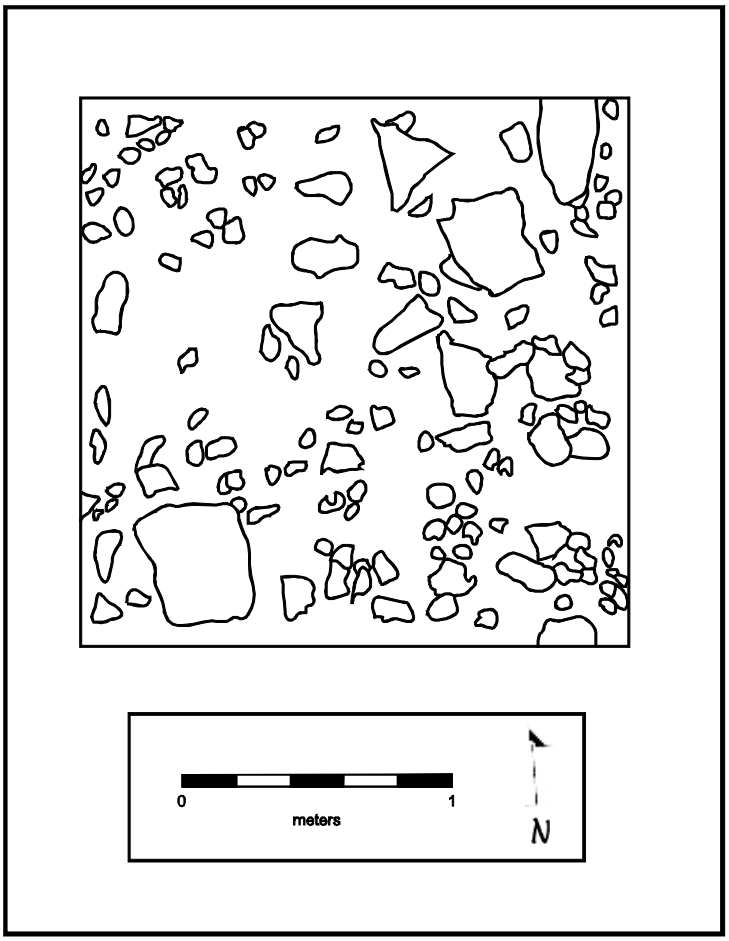


Figure 181. Yo'okop, Operation 21, Plan of Collapse

During the process of excavating of Level 2, Lot 1, two well-faced stones that seem to form the corner of a step (Feature 1) were discovered in the southwest corner; these provided access to Sacbe 4. The visible section of this step protruding about 60 cm from southern profile and about 48 cm from west profile (Figure 182). Feature 1, or the step, would mark the northwest corner of Sacbe 4. The removal of this deposit revealed that one of the great stones viewed from surface, which also protruded into the previous level, appeared to have been part of the wall of the causeway. However, it was out of their original position, perhaps moved to be used in another construction.

At the base of the step in the southwest corner (Feature 1) and 43 cm below the surface, a rough stucco layer was discovered, which corresponded to the surface of the plaza associated with the construction of Sacbe 4 (Figure 182). This rough layer (Floor 1) was designated as Level 3, and had an average depth of 12 cm and a whitish color (10YR 6/2). The surface of Floor 1 was poorly preserved, perhaps due to exposure to the environment over a long period of time. However, its association with Feature 1 is irrefutable; both are at the same level and Floor 1 is in direct contact with Feature 1. Due to a difference in color and compaction, Level 3 was divided into two sections in order to have better control of these contexts.

Level 3, Lot 1 corresponded to the most damaged part of the floor. Although it had a light gray color (7.5 YR 7/1), the soil was a little darker than Lot 2 (Figure 182). It was composed of a mixture of degraded stucco, soil, and few small stones (about 7 x 14 cm on average). Ceramics located in Level 3, Lot 1 included Saxche Orange Polychrome from the Late Classic, although most sherds recovered from this lot dated back to the Early Classic (see Chapter 40).

The next lot, Level 3, Lot 2, was located in the southern part of the unit and was the best preserved section of floor (Figure 183). Compaction of Level 3, Lot 2 was much greater, and it had a whiter color than the last lot (at 7.5 YR 8/1). While there was little pottery in Level 3, Lot 2, all samples that were identified were from the Early Classic. It is noteworthy that this lot was nearly aligned with the northern limit of Sacbe 4. This evidence suggests that this stucco surface was a continuation of the causeway. Therefore it can be argued that both are part of the same construction project. With respect to Feature 1, the excavation of Level 3 revealed that there was another line of stones that were the base of the step, making a sort of baseboard.

Once both lots of Level 3 were removed, we continued with the excavation of Level 4 (Floor 2), which was quite eroded and was divided into five sections according to the different characteristics that existed in the deposit. The first two lots were very similar to those lots of the previous level (Level 3, Lot 1 and 2), with a similar color and consistency (Figure 184).

Level 4, Lot 1 was a browner layer (7.5 YR 5/3) than the previous one, which was mixed with several small stones and was eroded for the most part, whereas Level 4, Lot 2 was designated as the part where the *sascab* floor was better preserved. No sherds were found in Level 4, Lot 1, while in Level 4, Lot 2 only fragments from the Early Classic were found. Level 4, Lot 2 also kept the same alignment that Level 3, Lot 2

Figure 182. Yo’okop, Operation 21, Level 3, Lot 1

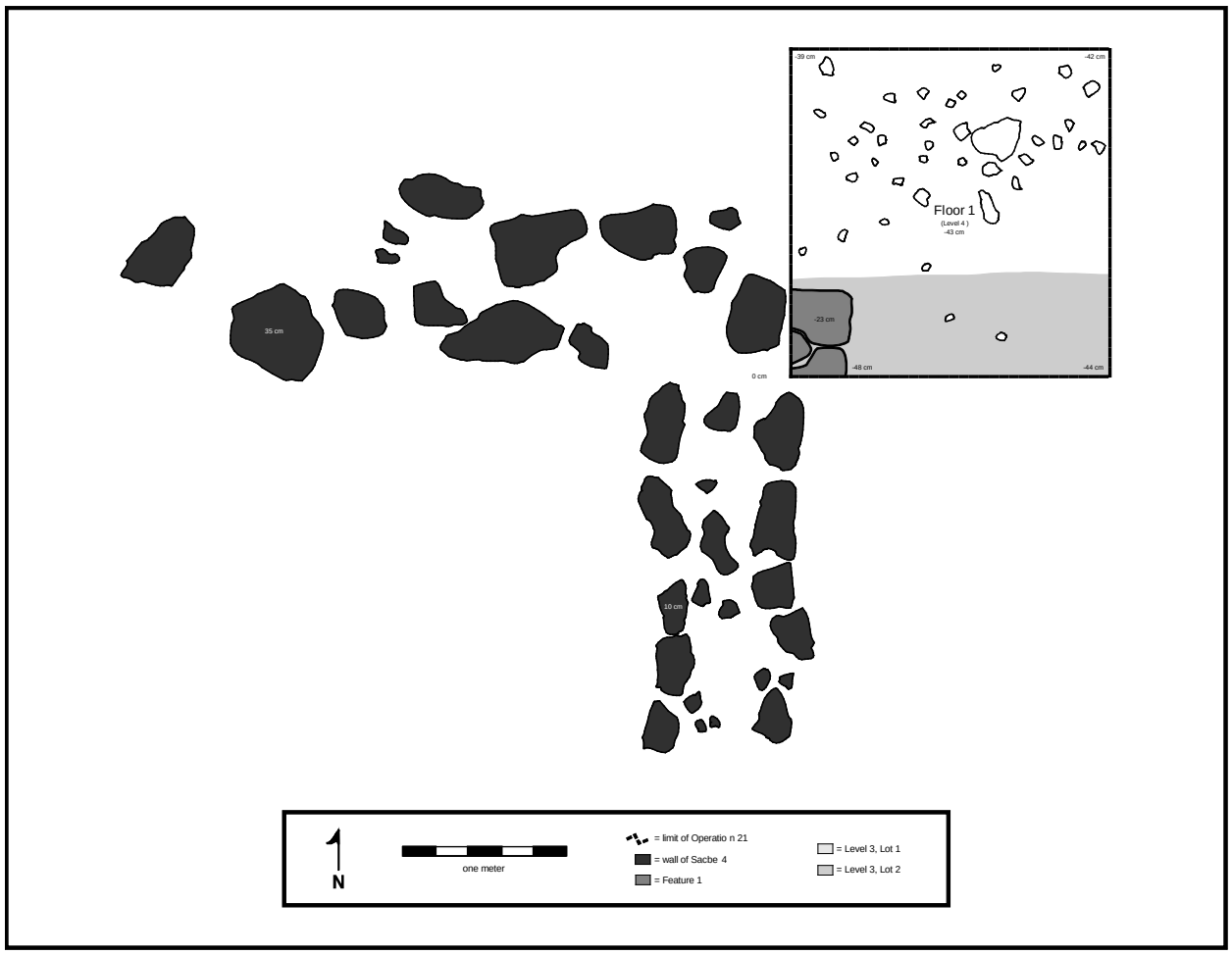


Figure 183. Yo'okop, Operation 21, Level 3, Plan Map

Figure 184. Yo’okop, Operation 21, Level 4, Lot 1

had, which also coincides with that of Sacbe 4 (Figure 185).

Once these lots were removed, Level 4, Lot 3 was begun below Lot 1; it was a reddish brown layer (2.5YR 5/3) that was contained a few stones. Although one fragment of Terminal Classic Muna Slate was found, the rest of the ceramic sherds found were from the Early Classic or Late Formative (see Chapter 40). Because there is only this unique piece, we speculate that the anomaly of this fragment of Late Classic could be due to accidental contamination, which occurred while the excavators entered or exited the unit.

The next level, Level 4, Lot 4, was located below Level 4, Lot 2, that is, below the floor that is associated with the base of Feature 1 (corner of the step). Its color and consistency was the same as Lot 3, and they actually were part of the same deposit, separated as a different lot for better control of the context (Figure 186).

While a sherd from the Late Classic was located in the Level 4, Lot 4, the overwhelming majority of the ceramic samples belong to the Xanabá Red and Yaxcaba Striated types from the Early Classic. The presence of said sherd from the Late Classic (Saxche Orange Polychrome) suggests that in this lot there was also an accidental mixing of the material, similar to what happened in the previous lot. However, these abnormalities are something to consider in future excavations in the area.

The last deposit, Level 4, Lot 5, was a concentration of soil mixed with *sascab* with a quite compacted consistency, located within Level 4, Lot 3 (Figure 187). Ceramics from Level 4, Lot 5 were exclusively from Late Formative types (such as Xanaba Red and Sierra Red).

The removal of these three last lots (Lots 3 to 5) led to the discovery of bedrock in the entire unit (Figure 188). Due to the presence of Feature 1, after registration tasks of the profiles of the unit (Figure 189), this feature was consolidated, as is next described.

Consolidation

In order to ensure the conservation to the step and reduce damage caused by our archaeological excavation, Feature 1 was consolidated. The first step of this process was the cleaning of the stones and the junctures between them. Following this, the soil of these areas was replaced with a mixture of lime and *sascab*, which was later painted with local soil to give a more natural look (Figure 190).

Once Feature 1 was consolidated completely, we proceeded to backfill the unit with the same material that was extracted from it, until the original level of the surface was reached (Figure 191).

Figure 185. Yo’okop, Operation 21, Level 4, Lot 2

Figure 186. Yo’okop, Operation 21, Level 4, Lot 4

Figure 187. Yo’okop, Operation 21, Level 4, Lot 5

Figure 188. Yo’okop, Operation 21, Bedrock

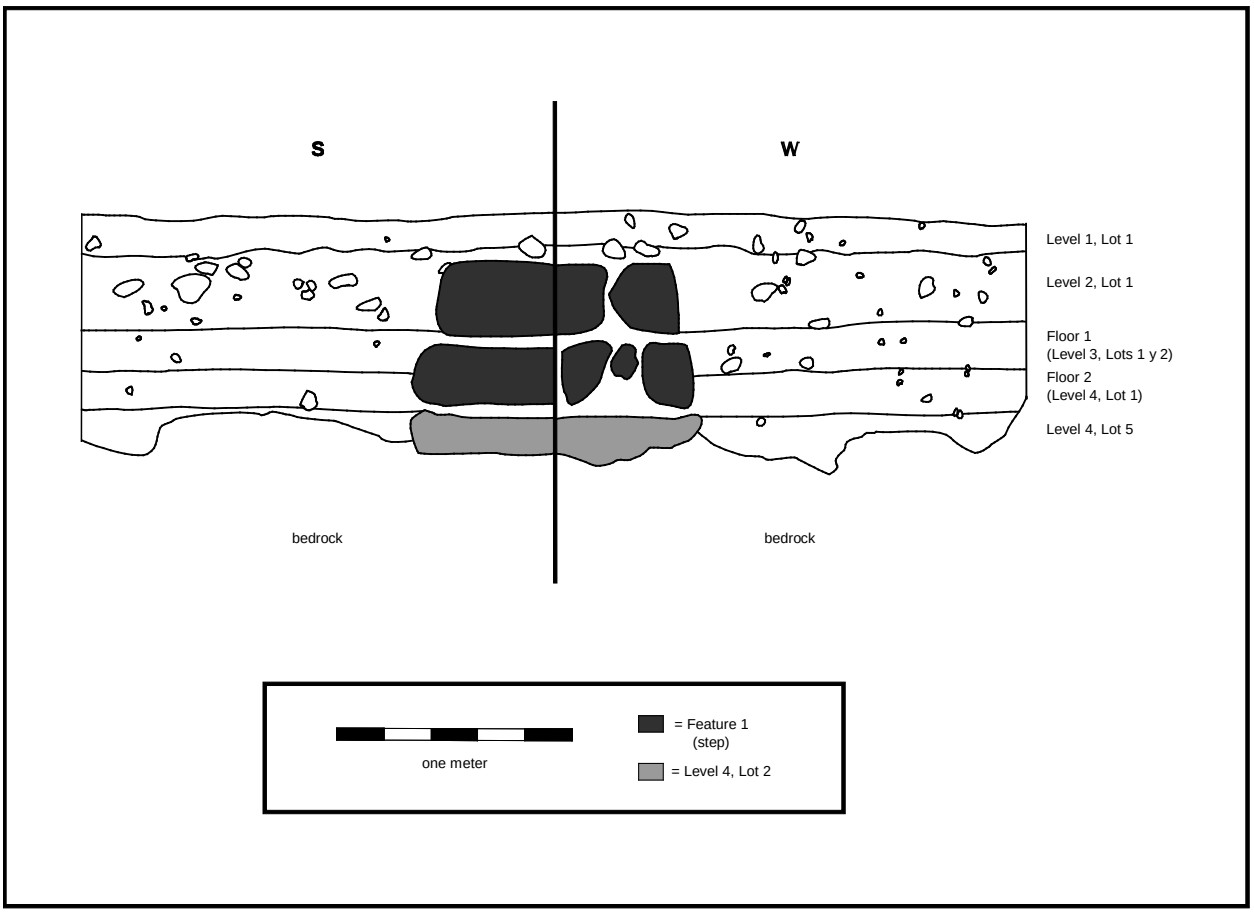


Figure 189. Yo'okop, Operation 21, South and West Profiles

Figure 190. Yo’okop, Operation 21, Consolidation

Figure 191. Yo’okop, Operation 21, Backfilled

Interpretation

Excavation of Operation 21, along with Operation 20 (see Chapter 23), has not only revealed interesting aspects about the timing and sequence of construction of the terminus areas of Sacbe 4, but also raises questions about the very nature of this element.

The stratigraphic sequence observed in Operation 21 began with Level 4, Lot 5, which corresponds to the original natural ground surface. This deposit, according to the ceramic evidence, dates from the Late Formative. After that, sometime in the Early Classic, a surface of stucco (Level 2), which was excavated as Level 4, Lot 1 and 2, was revealed. Level 4, Lots 3 and 4 correspond to the subfloor of Floor 2. All previous lots, including Floor 2, belong to the Early Classic.

It is also in this period that the base of Feature 1 would have been constructed, that is, the base of the corner of the step of Sacbe 4. This base was placed directly on Floor 2. Because only a small section of this feature was exposed, we cannot determine fully whether the base or foundation runs around the perimeter of Sacbe 4. However, based on the results of this excavation along with those provided by Operation 20 (see Chapter 23), it seems very likely that this base itself stretched around all of this construction.

The next layer, Level 3, was another flat surface (Floor 1). Lot 1 of this surface (Level 3, Lot 1) corresponds to the section that was out of the direction of the road, while Lot 2 seems to have been an extension of Sacbe 4, since they are more or less aligned. The difference between these two areas may be due to traffic while exposed. For example, if Lot 2 was a continuation of the transit area of pedestrians from Sacbe 4, this may have been more compacted, which made it more resistant to environmental degradation than Lot 1.

If the step (Feature 1) continued along the entire width of the *sacbe*, at least in the eastern part, it means that it was necessary to step down from the platform N6W2-10 and immediately back up another step in order to access Sacbe 4. What is not in doubt is that both Floor 1 and Floor 2 are stratigraphically related to the causeway. The first of these two, Level 1, corresponds to a leveling that existed sometime in the Early Classic, while Level 2 is the level associated with its construction. It is noteworthy that these two floors were also discovered in Operation 20 (see Chapter 23).

Another possibility is that, coincidentally, Operations 20 and 21 have been placed precisely in these areas where there was a formal access to the sacbe. If so, in addition to having the very good fortune to locate these excavations, it would mean that access to Sacbe 4 occurred only at its ends. However, to test these assumptions it is necessary to conduct a more extensive excavation, in order to better appreciate all the morphology of this causeway.

Following the creation of this stratigraphic sequence, Level 2 was the sediment the accumulated during the Terminal Classic occupation and the collapse of nearby structures, while Level 1 is the sediment formed since the site was abandoned until today. It is noteworthy that, although there are some Postclassic shrines at the top of some nearby structures, including Structure N6W2-9, no fragments of that period were located in this unit.

In general, data obtained in this unit have been very fruitful for the study of this part of the settlement of Yo'okop, but mainly for its system of causeways. These results, combined with those obtained in Operation 20, suggest that Sacbe 4 would be the oldest road of the whole system, since the plazas associated with its construction date from the Early Classic. Although there are no samples coming from directly inside the causeway, stratigraphically, the Sacbe 4 cannot precede Floor 1 (Level 3, Lot 2), which gives a strong foundation for these assumptions. Based on this evidence, Sacbe 4 would then be an outline of the causeways that would be built in later times (Terminal Classic).

Another possibility is that the Sacbe 4 is not a causeway, but it's actually only an elongated platform. If so, Feature 1 of Operation 20 and Operation 21 is actually a base of the platform. If this were the case, then the stones that have been interpreted as the walls of the causeway would actually top wall of said platform.

However, so far we have not located any superstructure that had been placed on Sacbe 4, so it appears that this assumption is not very feasible. The way to compare and determine the nature of this causeway would be through excavating its entire periphery. These tasks could be done in the future, not only to reveal its form, but also serve to confirm the date of its construction.

Without doubt, the results of Operation 21, along with Operation 20, have left more questions than answers about the nature of Sacbe 4 and the date of the entire causeway system of Yo'okop. These questions will be investigated in future seasons, to the extent that time and resources permit. However, these contexts excavated next to Sacbe 4 are essential to have a better understanding of the large settlement of Yo'okop.

Part 2: The *Ejido* of Saban

Chapter 25: Yo'okop, Operation 22

Alejandra Badillo

Operation 22 was established with the aim of obtaining a relative chronology and getting a better understanding of the construction system in the southeastern part of the plaza of Group D. Therefore it was placed at the plaza right in the area where Sacbe 3 connects with this plaza (Figure 192). Thus, in addition to dating the plaza, although indirectly, a date for the construction of the *sacbe* was obtained.

This excavation unit had 3 levels, which were excavating following the natural and cultural stratigraphy that was found. It began with the removal of a layer of leaf litter up to 3 cm thick (Figure 193), which exposed the surface of Level 1, Lot 1 (Figure 194). Within this level, several roots up to 10 cm in diameter were observed, mainly in the northwest, east, and southeast sections. This level was characterized by a black brown (7.5 YR 3/2) loamy soil, with abundant fine roots, and very low compaction. In this level, several irregularly-shaped stones, of 6 to 20 cm in size with no apparent order, were located. The maximum depth of this level was 8 cm.

Level 2, Lot 1 corresponds to a cultural layer composed of gravel mixed with a clayey soil, with thin and thick roots, and low compaction. It had the same color Level 1 Lot 1. Within this level a flint striker was found that was 5-to-10 cm thick (Figure 195).

Later in the excavation, the fine and coarse roots continued, but a change was detected in the content (Level 2, Lot 2), because several larger stones, 10-30 cm long, were found within a clayey soil with a very dark gray color (7.5 YR 3/1) (Figure 196). This lot was construction fill, 1.30 to 1.50 m deep, formed by rocks 60 to 70 cm long. In this layer, an obsidian blade fragment was found.

After removing this dry fill, a silty clay sediment was located, which was designated as Level 3, Lot 1; it was of low compaction and of a dark reddish brown color (2.5YR 3/3). The layer contained abundant pebbles and 3-to-10-cm-long irregular stones (Figure 197). This level ended with the discovery of bedrock and a *sascab* area, at 1.65 m below the surface (Figure 198).

After the completion of the excavation, registration tasks were conducted and then the unit was backfilled with soil and rocks that had been previously removed (Figure 199).

Interpretation

The results of this excavation demonstrated that Sacbe 3 dates back to the Terminal Classic period, when the surface of the plaza was elevated. For that reason, it can be assumed that this plaza and the *sacbe* are contemporary, which corresponds to the results obtained from the other extreme of the *sacbe*, at Group A (see Chapter 20) (Figures 198, 200). The surface of the plaza was placed over this level, which means that this was the only construction episode in this plaza associated with the *sacbe*.

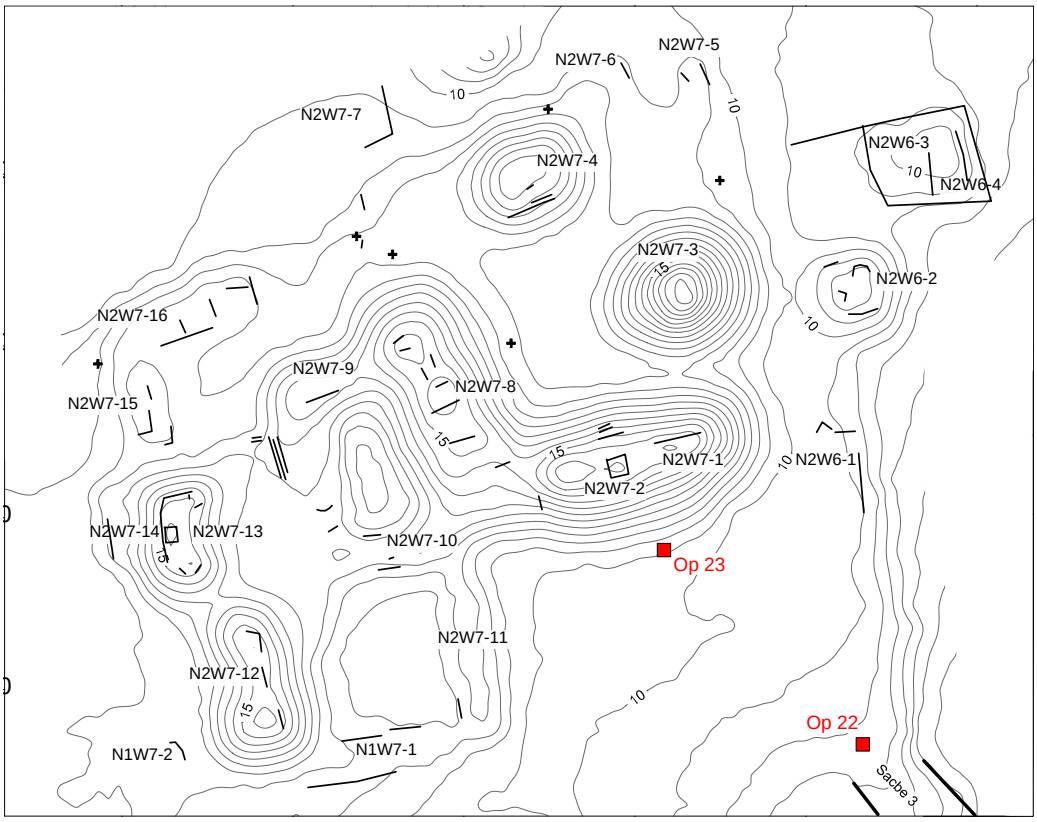


Figure 192. Yo'okop, Group D, Location of 2014 Test Pits

Figure 193. Yo’okop, Operation 22, Surface

Figure 194. Yo’okop, Operation 22, Surface of Level 1, Lot 1

Figure 195. Yo’okop, Operation 22, Level 2, Lot 1

Figure 196. Yo’okop, Operation 22, Level 2, Lot 2

Figure 197. Yo’okop, Operation 22, Level 3, Lot 1

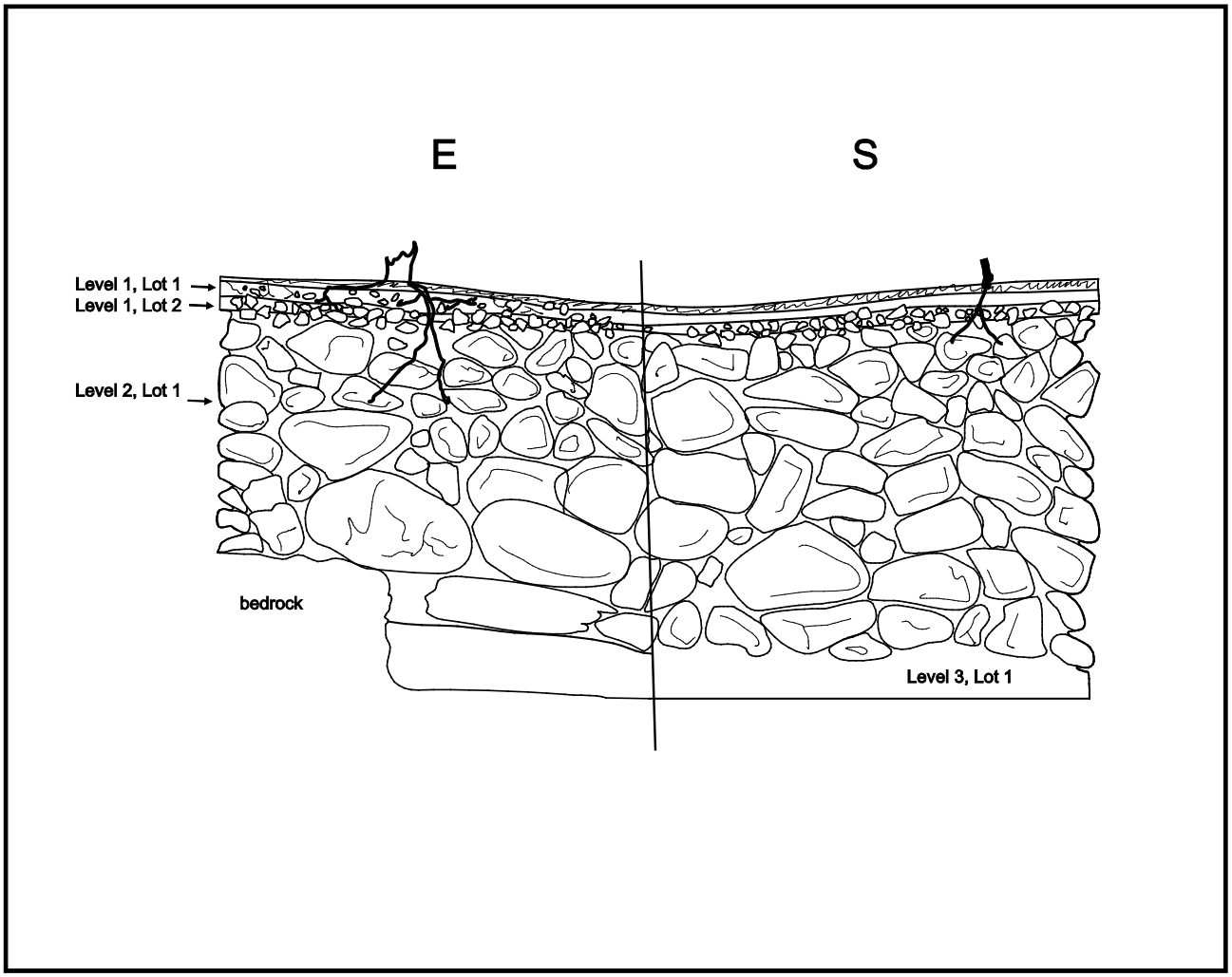


Figure 198. Yo'okop, Operation 22, East and South Profiles

Figure 199. Yo’okop, Operation 22, Backfilled

Figure 200. Yo'okop, Operation 22, North (top left), East (top right), South (bottom left), and West (bottom right) Profiles

Part 2: The *Ejido* of Saban

Chapter 26: Yo'okop, Operation 23

Alberto G. Flores Colin and Leslie Reyes

This unit was the last excavation that was conducted at the site of Yo'okop during the 2014 season. As with Operation 22 (see Chapter 25), it was carried out in Group D, the smaller of the site's four groups (Figure 192).

The test pit was placed at the base of Structure N2W7-1, the largest range structure in the group. The aim of the selection of this position was to investigate the timing of this plaza, as well as to see its construction sequence and its association with Sacbe 3, which ends at the fringe of this cultural surface.

Operation 23 was a test pit of 2 x 2 m, which was excavated following cultural stratigraphy (Figure 201). Level 1, Lot 1 was a dark brown soil (7.5 YR 3/2), which was mixed with various roots and stones of various sizes. Although most of the pottery located in this layer could not be identified because it was quite eroded, a single sherd of the Terminal Classic Muna Slate type was identified (see Chapter 40). At the end of this level, in the north profile of the unit, an alignment of well-cut stones (Feature 1) was discovered, which may be the step of the base of the structure.

Level 1, Lot 1 ended when a whiter sediment was discovered; at this point it was decided to change to the next level. This new level, Level 2, was divided into two lots due to the presence of a line of stones that partially crossed the unit (Figure 202). The southern part of the unit corresponded to Level 2, Lot 1, which was composed of a brown (7.5 YR 4/2) layer mixed with stones from the collapse and ended in the line of stones found in the northern half of unit.

Level 2, Lot 2 was the area located in between these rocks and the north side of the unit (Figure 203). Although the color was identical, the difference between the two lots was obvious in terms of compaction, with Level 2, Lot 2 more compact than Lot 1. Regarding the ceramics, in Lot 1 no fragments were found, while in Lot 2 most of the ceramics could not be identified, although a Late Classic fragment of Muna Slate type was located.

Once the excavation of both lots was finished, it became obvious that the division between them was not an architectural element, but it was apparent formation created by stones coming from the collapse. It is noteworthy that within this level several well-cut stones were found; these were positioned face-down. This context showed the process of collapse that was happening in the building over time (Figure 204). These stones would have been part the façade of the building or its superstructure.

Following this, we continued with the liberation of the wall of well-cut stones (Feature 1), located on the north wall, which was exposed at the change to the next level. Both lots of Level 2 ended with the discovery of a tamped *sascab*, very pale

Figure 201. Yo'okop, Operation 23, Surface

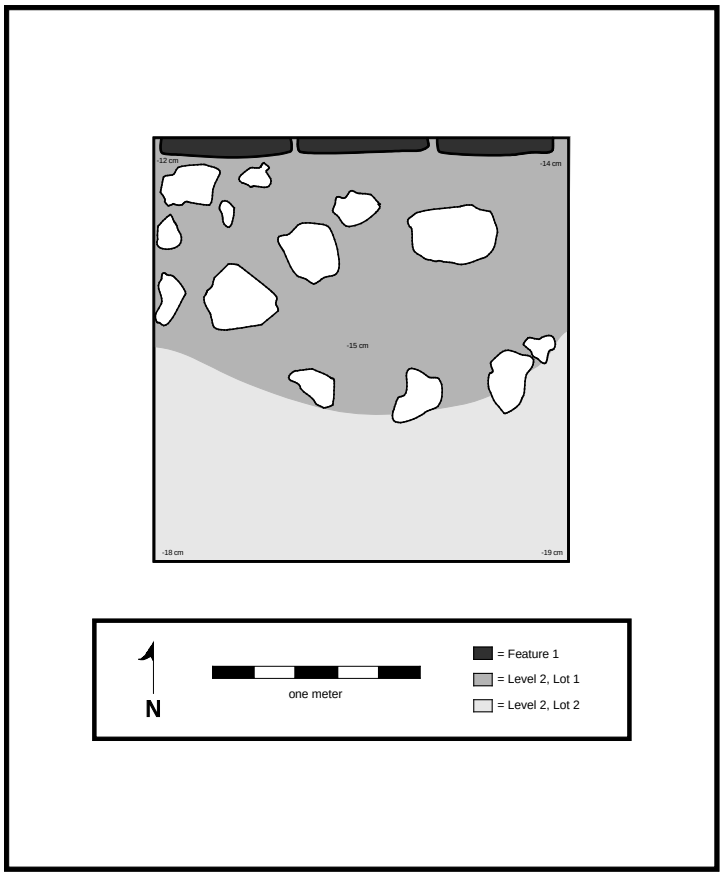


Figure 202. Yo'okop, Operation 23, Level 2, Lots 1 and 2

Figure 203. Yo’okop, Operation 23, Level 2, Lot 2

Figure 204. Yo’okop, Operation 23, Level 2, Lot 1, Façade Element

brown in color (10YR 7/3), which was classified as Level 3, Lot 1 (Figure 205).

Level 3 corresponded to a layer of *sascab*, which was directly associated with the base of Feature 1 or step. This layer (Floor 1) had a very pale brown color (10YR 7/3) which was spread throughout the unit; however, the state of preservation was different in two sections, which was why it was divided into Lot 1 and Lot 2. Level 3, Lot 1 was the most eroded section of this layer, which was located in the southern part of the unit, while the best-preserved area in the north was designated as Level 3, Lot 2 (Figure 206). Both lots consisted of a sandy sediment, due to the abundance of *sascab* they contain, which was mixed with several stones of about 20 x 15 cm on average.

With respect to ceramics, both lots (Level 3, Lot 1 and Lot 2) contained samples of Xanaba Red and Yaxcaba Striated, and two sherds of Dos Arroyos Orange Polychrome, all from the Early Classic. However, in Level 3, Lot 2 a sherd of Terminal Classic Muna Slate was found. The presence of this anomaly in the sample could be explained as an accidental mixture, which may have occurred when the excavators moved in or out of the unit. The above assumption is justified because this fragment would be the only example (of all the sherds recovered at Level 3) that does not belong to the Early Classic.

Excavation of both lots ended when another floor was found (Level 2), which extended throughout whole unit. This deposit was designated as Level 4, Lot 1 (Figure 207). This level corresponded to a flat layer of white stucco (10 YR 8/1), whose surface was badly eroded. The excavation revealed that the Floor 2 consisted of a mixture of stucco, *sascab* and a few gravel stones. The pottery in Level 4, Lot 1 was represented by fragments that date from the Early Classic, mainly of the types Xanaba Red and Yaxcaba Striated.

Floor 2 was excavated until a series of large stones (about 30 x 40 cm on average) were found, which corresponded to the top of the subfloor of this Floor 2; therefore this cultural layer was excavated as Level 4, Lot 2 (Figure 208). This layer was initially formed of small stones or gravel, while at the base large stones were located (of about 50 x 70 cm). In some sections, this rocky fill was formed by dry core fill, while in other areas rocks were mixed with *sascab*. Unlike the last three lots described above, which contained only Early Classic ceramics, in Level 4, Lot 2 three fragments from the Late Classic were located, specifically of the types Sacalum Black on Slate and Saxche Orange Polychrome.

Below this level, a new layer (Level 5, Lot 1) was found (Figure 209), which consisted of dark reddish brown soil (5 YR 3/3), locally known as *chac lu'um* (literally "red soil"). This deposit consisted of a sand-loamy sediment, which was very plastic and friable when wet and sandy when it was dry. In addition, within this level a large quantity of fine roots were observed.

Cultural materials recovered from Level 5, Lot 1 included a shell fragment, a fragment of obsidian blade (distal end), plus a good amount of ceramic sherds (193 fragments). Although several examples are from the Middle Formative, Late Formative and Early Classic are included in this sample, the latest fragments identified correspond

Figure 205. Yo’okop, Operation 23, Level 3, Lot 1

Figure 206. Yo’okop, Operation 23, Level 3, Lot 2

Figure 207. Yo’okop, Operation 23, Level 4, Lot 1

Figure 208. Yo’okop, Operation 23, Level 4, Lot 2

Figure 209. Yo’okop, Operation 23, Level 5, Lot 1

to the Late Classic (Saxche Orange Polychrome). Once all this reddish brown sediment was removed, bedrock was exposed throughout the unit (Figure 210), which meant the end of the excavation.

Consolidation

Once finished with the task of digging, we proceeded with the consolidation of Feature 1, the step of well-cut stones located on the north wall of the unit. The purpose of conducting this consolidation was to ensure its preservation, and therefore we reduced to a minimum the damage caused by our archaeological intervention. During this process we proceeded to remove the sediment located in-between the stones, which was replaced by a mixture of lime and *sascab* (Figure 211).

Once this was completed, after all the unit had already been registered (Figure 212), the back-filling of the unit was made with the same material that was removed, a task that ended when the level of the original surface was reached (Figure 213).

Interpretation

Results of this operation have been very useful to confirm the hypothesis about the construction of the causeways of the site, and they have yielded some other interesting facts, such as the construction style of Group D.

According to the results of the operation, the construction sequence is as follows. Level 5, Lot 1 corresponds to the natural surface where the first occupation of this part of Group D was settled. This occupation or range of occupations may have occurred from the Late Formative to the Early Classic period in which there was no significant change in this part of the settlement.

Later, a leveling was created that resulted in a plaster floor (Floor 2), which involved a great effort in terms of social cohesion, as well as building materials that were employed, as evidenced by the large quantity of *sascab* used in its construction. Both this Floor 2 and its subfloor (Level 4, Lot 1 and 2) were built sometime in the Late Classic.

Following this first artificial leveling, a second leveling was constructed, which again increased the height of the plaza, which led to the creation of Floor 1 (Level 3, Lots 1 and 2). This thick stucco floor was also built sometime in the Late Classic period, in addition to the step also located in the northern profile (Feature 1). Based upon this information, it can be proposed that the range structure (Structure N2W7-1), in front of this unit was constructed also during this period.

After Floor 1, perhaps when the site fell into disuse or was abandoned, materials from the collapse of Structure N2W7-1 along with other natural processes, formed the deposit that was excavated as Level 2. Evidence of this collapse are the well-cut stones from the façade of Structure N2W7-1, which were located in the position that naturally fell. This process of abandonment of the site occurred at some point during Terminal Classic.

Level 1, Lot 1 was formed by sediment that has accumulated from the Terminal Classic to today, as evidenced by the abundant organic matter contained therein.

Figure 210. Yo’okop, Operation 23, Bedrock

Figure 211. Yo’okop, Operation 23, Feature 1 Consolidated

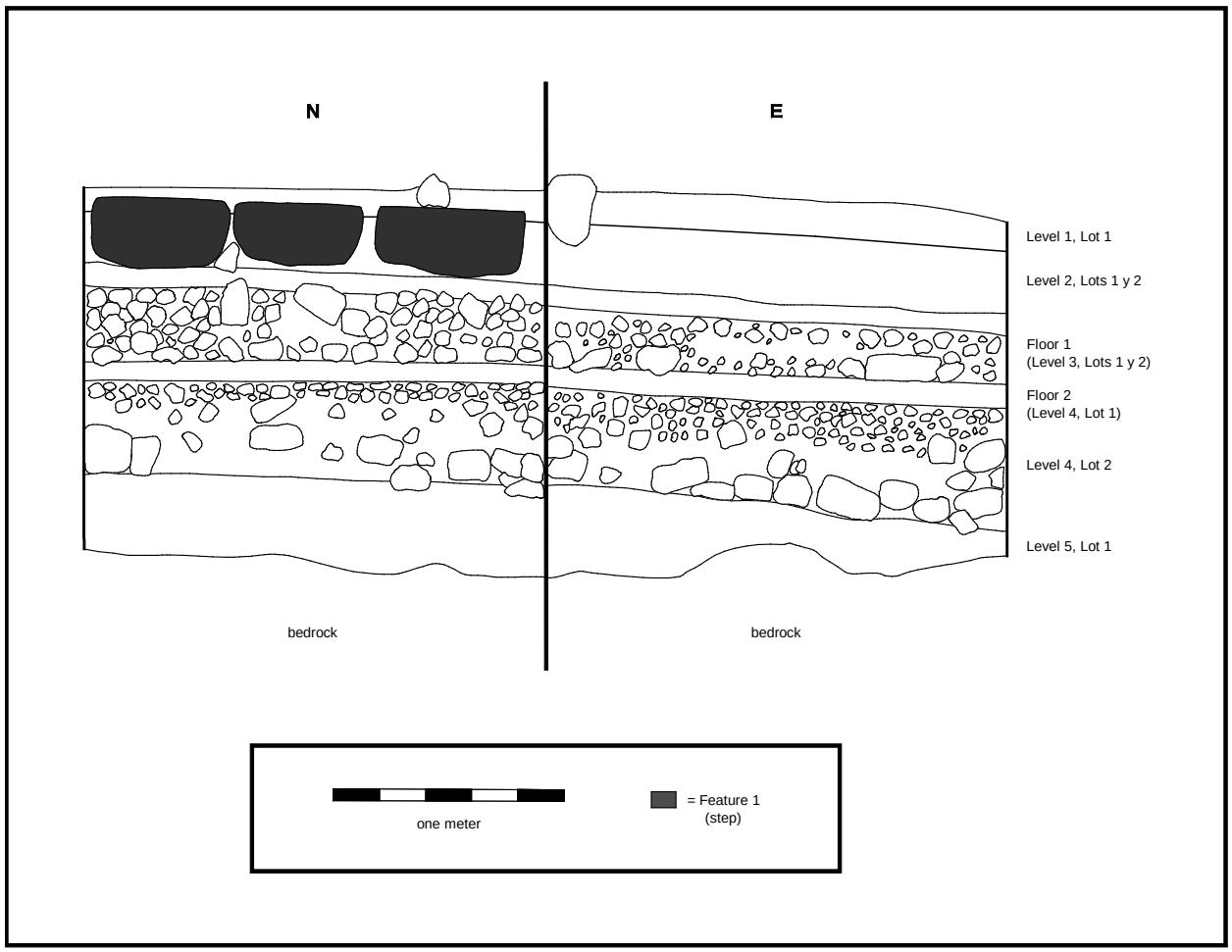


Figure 212. Yo'okop, Operation 23, North and East Profiles

Figure 213. Yo'okop, Operation 23, Backfilled

While the results of this unit were the ones we had anticipated, it has also revealed details it was not expected to locate in Group D, the smaller group of the four so far known at Yo'okop. As has happened with other examples in the region (Flores and Normark 2004; 2005), it was expected that the place where the *sacbe* ends belonged to the Terminal Classic. While this is partly true, as noted in Operation 22 (see Chapter 25), the area closer to the terminus structure (Structure N2W7-1) dates from earlier times (the Late Classic), which indicates that part of the plaza was there when the plan for the construction of Sacbe 3 was developed.

Additionally, the type of carving of the stones that form Feature 1, as well as other façade stones found in the collapse, suggest that this part of the site, despite being the smallest group, also housed buildings of similar quality and construction to those observed in Group A and Group B. Equally, the presence of sherds ranging from the Middle Formative through the Terminal Classic also speaks of the long occupational history of this group.

While much remains to be learned about Group D, as well as the rest of the site in general, these results allow us to increasingly approach an understanding of the long and complex occupation that the extensive settlement of Yo'okop had.

Part 2: The *Ejido* of Saban

Chapter 27: Mapping of the Post of La Aguada (Military Post Number 8)

Alberto G. Flores Colin and Alejandra Badillo Sánchez

This settlement was visited in 2008 by Jorge P. Huerta Rodriguez, but could not be registered because lack of time. It was not until the 2014 season that the clearing and mapping of the main part of this settlement was conducted. This interesting site is composed of both Prehispanic elements as well as buildings dating from the Caste War period.

In reality, this site must be part of the settlement of Yo'okop, since it is only about 280 m east of Group A. This assumption is based on information from our local workers, who report that the settlement is continuous between this point and the Group A. However, this data could not be verified on the surface; therefore this settlement has been classified as a different site for the present. In future seasons, when this information is confirmed, will be evaluated whether or not this area is part of one group of Yo'okop.

The site is located on a series of low hills that exist south of the aguada of Yo'okop, whose runoff gives rise to this body of water as it apparently has no water entering from a stream or spring (Figure 149). It is on these hills and near the center of the width of this body of water where the vestiges of the site are located. These hillocks, in turn, have several Prehispanic terraces that become wider until they reach the top, the place where the remains of the military position were also situated. Only the last three terraces were recorded, which are where the Caste War fortifications and the main Prehispanic structures are located (Figure 214).

On the penultimate of these terraces lies Structure S1E1-1, a military position having a shape of a rhomboid. The height of this fortification is 4.5 m on its north side (Figure 215), while to the south it reaches 2 m (Figures 216 and 217). This construction is formed by thick walls of about 2.4 m in width, with a height of 1 m on average on the interior (Figure 218), while from the outside the height is variable, depending on the ground level upon which it is built (Figure 219). In several parts of these walls several well faced stones can be easily seen. These seem to have a Prehispanic origin (probably dating to the Terminal Classic) and were reused to build this fortification (Figure 220).

Access to the top of this fort is through a 2.5 m-wide ramp, bordered by two barricades of about 70 cm on average, which are quite collapsed, suggesting that its height could be much higher (Figure 221). The surface within this military post is flat and was intentionally leveled. The interior walls have at least eight rows of stones in their best preserved segments. Although they are fairly well conserved, there are several sections that have already fallen, mainly in the northeast side (Figure 221).

Although no architectural element was located *in situ*, it is very likely that this fortification has been built on a Prehispanic mound that was partially dismantled to level the surface of the fort. In this case, the base of the Structure S1E1-1 belonged to a pyramidal structure of similar height, which was the central building of this settlement.

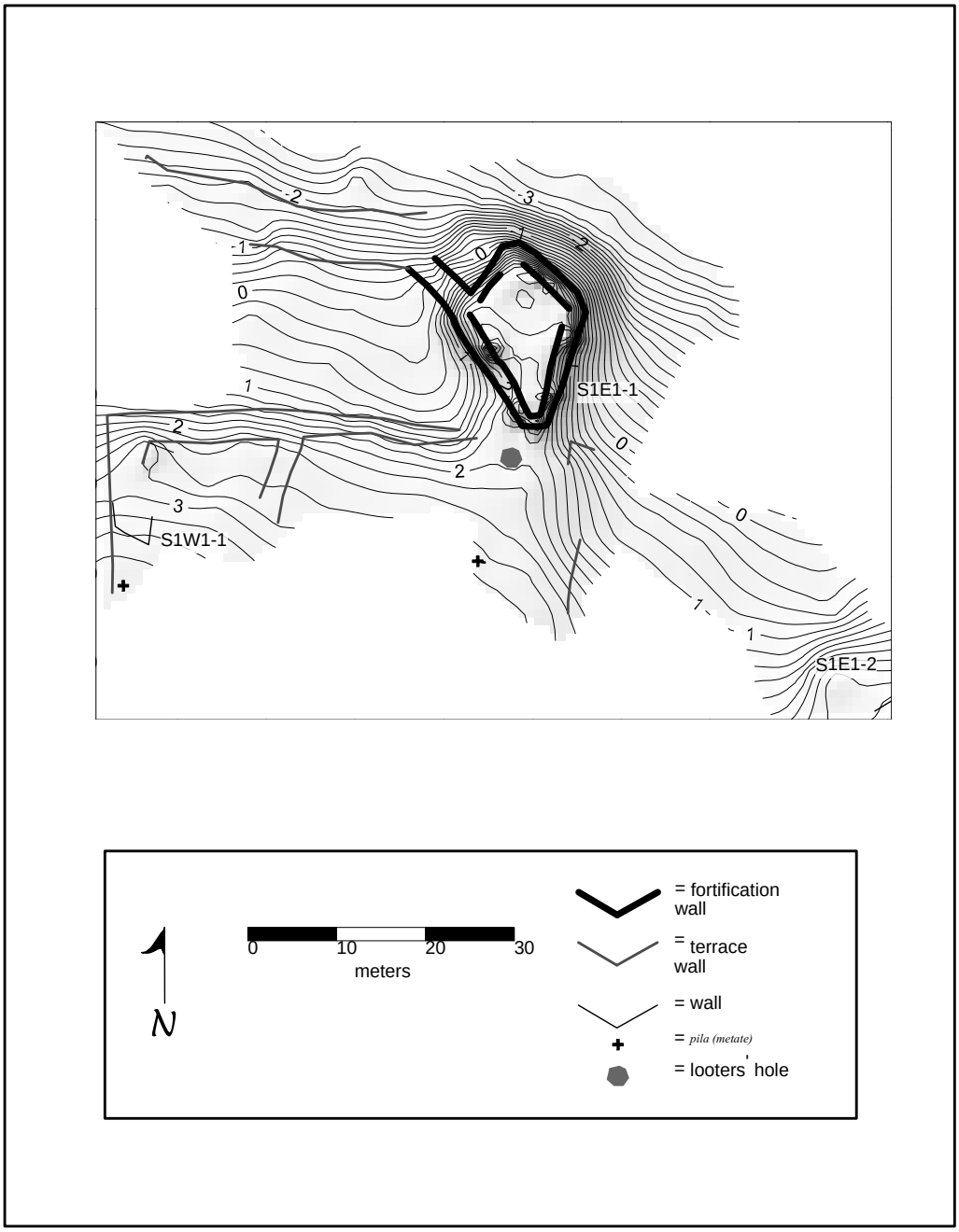


Figure 214. Map of the Post of La Aguada

Figure 215. The Post of La Aguada, View to the Northwest

Figure 216. The Post of La Aguada, View to the Southeast

Figure 217. The Post of La Aguada, View to the Southeast

Figure 218. The Post of La Aguada, Interior Wall

Figure 219. The Post of La Aguada, Exterior Wall

Figure 220. The Post of La Aguada, Façade Element

Figure 221. The Post of La Aguada, Entrance

Immediately south of the fort, it is looters' hole that is almost circular in shape, located in a high area that connects the Structure S1E1-1 with a terrace located further south. The pit is about 2.2 m in diameter and may have been a well that was used as an earth oven. The interior area of this well shows "dry core" fill, which is part of the leveling that connects the structure with the terrace.

West of the hole, several alignments were located. These lines run from north to south and correspond to the retaining walls of the terraces. Approximately 35 m southeast of these alignments, a platform was found, which is the base for a foundation brace (Structure S1E1-3) (Figure 222). This platform was only partially mapped, and we did not have time to register this element in its entirety. It is likely that there are other structures in this direction, because we saw some signs in the weeds; however, due to time constraints, we were unable to verify the nature of these elements.

In addition, also to the west of looters' hole, another terrace, which still has its well-preserved walls, was recorded. The height of the terrace is about 70 cm to 1 m, depending on the surrounding topography. On this terrace, two stone alignments, named Structures S1W1-1 and S1E1-2 were found (Figure 214). These could be the walls of two platforms that lie on this Prehispanic elevation. On each one of these two platforms / terraces, heavily eroded *metate* fragments were documented. At the west end of these terraces, it was possible to observe a C-shape foundation brace, Structure S1W1-2, which is oriented to the north (towards the *aguada*).

In a survey conducted west of these foundation braces, other constructions of the same type were observed, as well as several small platforms. However, due to both the lack of time and by the density of the vegetation in the area, these constructions were not included in the mapped area.

As has been mentioned, the Prehispanic part of this site could be part of the large settlement of Yo'okop, while the remains of the Caste War correspond to one of the fortifications established by General Ignacio A. Bravo during his campaign against Maya insurrection in 1901. According to historical sources (Badillo et al. 2010: 22; Dumond 2005: 606), this corresponds to Military Post # 8, known as "la Aguada". This position was a link in a chain of 15 fortifications that were placed along the road between the towns of Peto and Noh Cah Santa Cruz, now known as Carrillo Puerto, a city that was the center of Maya resistance during the Caste War.

This construction, as well the sites named as La Trinchera (Flores and Huerta 2008; Johnstone and Flores 2010) and Fortín of Yo'okop (Badillo et al. 2010; Badillo 2013), were part of the same chain of fortifications, which correspond to positions 6, 7 and 8 respectively.

With respect to the Prehispanic materials, no ceramic fragments were observed on the surface, mainly because the abundant leaf litter existing in the area. The historical materials found on the surface included glass bottles, very similar in shape to those located in the Fortín de Yo'okop, which supports the hypothesis that both fortifications are contemporary.

Although there is still much research to be done in the area, the discovery and mapping of this site has opened new possibilities for two of the main research interests that the project has had over recent years, the settlement pattern of Yo'okop and documentation of the remains of the period of the Caste War. For this reason, this place is one of the settlements to be excavated in future seasons. These future tasks will have

Figure 222. The Post of La Aguada, Adjacent Structures

to focus on the occupational history of this part of Yo'okop, as well as spatial relationships and interactions between the Prehispanic ruins and the remains of the Caste War.

Part 2: Saban *Ejido*

Chapter 28: Mapping of the Site of Piimmuul (Yaxche 4)

Alberto G. Flores Colin and Jorge P. Huerta Rodríguez

This settlement was first recorded in 2010 (Flores 2010a). Currently, it is the southernmost site that has been located in our study area (Figure 2). The Piimmumul site is located in an area that, until recently, was devoted to an ecological reserve; this is why that is surrounded by well-preserved primary vegetation. The site is accessed by a dirt road that runs between the villages of Dzoyolá and Rancho Viejo. From this road, is necessary to take a path that goes towards the south, and about 150 m onward, the settlement is located.

Although, according to our consultants, there are other structures about 200 m away, the part of the site that we have registered consists only of three buildings (Figure 223). Structure N1W1-1 (Figure 224) is a 4.5-m-tall pyramidal structure, which is formed by coarse stones without any evident architectural feature. On top of this mound, several *Ceiba pentandra* trees are located (Pennington and Sarukhán 2005:372–373), in Maya known as *piim*. For this reason, we have assigned this name to the site, which means "mound with *piim* trees."

Due to their conical shape, as well as the fact that there are no visible architectural features, it is not possible to know which side was the front of the building. Its construction style is very similar to that observed at other sites as Ramonal Quemado or Hopemul, in the *ejido* of San Felipe (Shaw and Flores 2008a, 2008b), which are also built with rough stone without any façade elements.

At the base of the Structure N1W1-1, and on its west side, a circular-shape foundation brace was located, Structure S1W1-1 (Figure 225), which is 4.5 m in diameter. This foundations brace is formed by a line of raw stones, and it seems that its entrance faced north. For this reason, it is probable that Structure N1W1-1 also faces north.

Fifty meters northwest of these constructions a platform, partly built on a natural outcrop of limestone, is located. This structure (Structure N1W1-2) has some alignments on its summit, although due to the abundant leaf litter that is covering the ground surface it was not possible to define its shape. These alignments are perhaps traces of several perishable structures that once laid at its top.

As has been mentioned, local consultants report the presence of more structures at a distance not exceeding 100 m, but because lack of time it was not possible to verify the presence of these buildings. It is noteworthy that there is no known presence of wells or other water source in the area, which raises the question of where this liquid was obtained by the ancient inhabitants.

This site, although small in size, has not been strongly affected by colonial and modern occupations. Therefore, has been assumed that this settlement was out of the Spanish colonial frontier. In regard to the chronology, due to the abundance of leaf litter, no fragments of ceramic were observed on the surface. However, judging by its composition and style, and based on the data from other sites in the region, it is thought that it must belong to the Terminal Classic.

There certainly should be more settlements in the southern part of the study

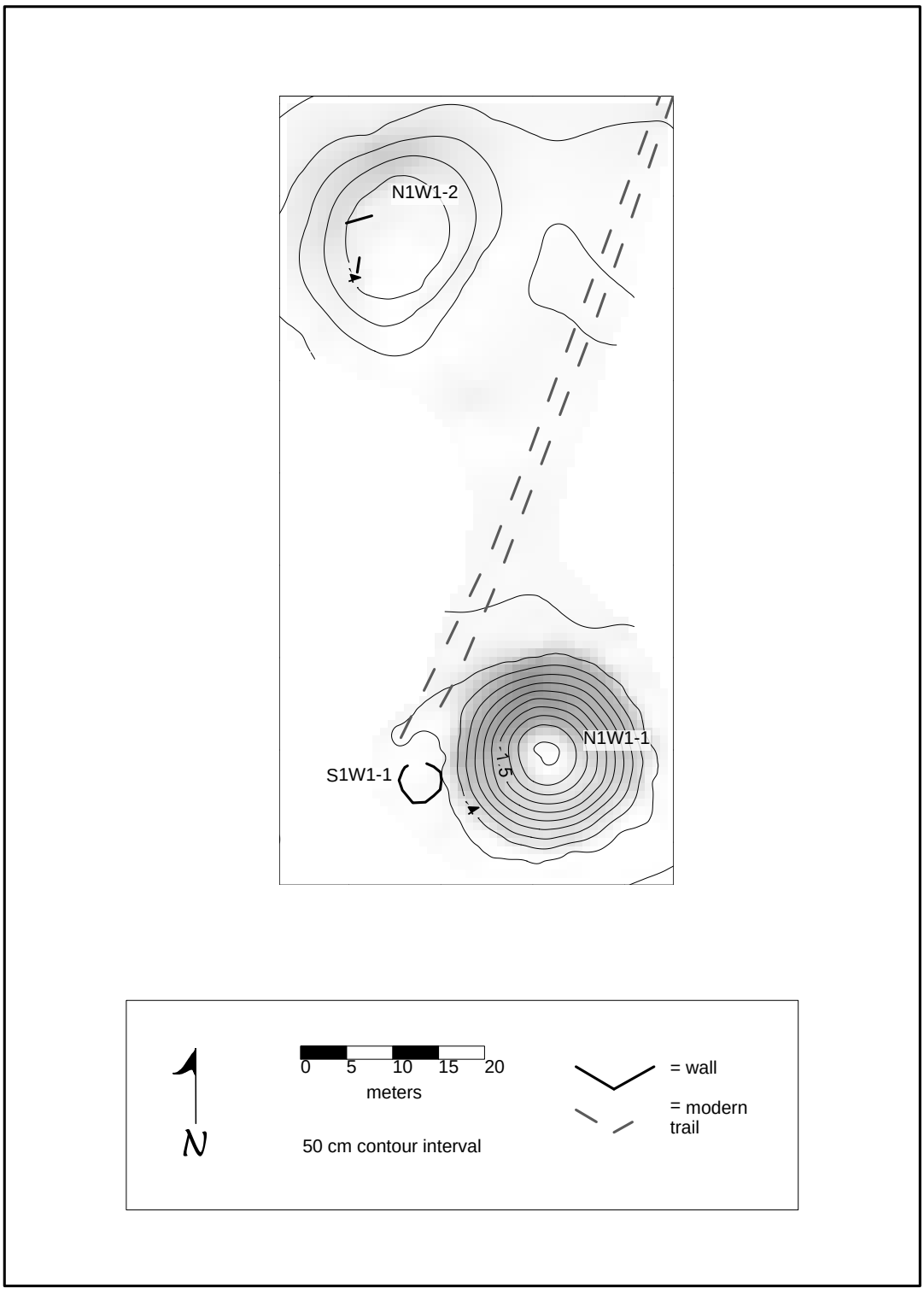


Figure 223. Map of Piimmuul (Yaxche 4)

Figure 224. Panorama of Piimmuul (Yaxche 4)

Figure 225. Piimmuul, Structure S1W1-1

area. Therefore, as our research advances, it is likely that this site will no longer be the southernmost documented so far in the survey of the CRAS Project. These assumptions will be contrasted in the future with the advance of our research in the region.

Part 3: The *Ejido* of Sacalaca

Chapter 29: Parcela Escolar, Structures N10W1-2 and N8E1-2, Operations 4 and 5

Dave Johnstone, J. Pablo Huerta R. and Mike Bradford

Two operations were planned for Parcela Escolar this season involving circular foundation braces. The first, Operation 4, is located in the center of the site associated with a 3 meter tall pyramidal mound. The second, Operation 5, is located at the southern edge of the site without any immediate neighboring structures. It was hoped that by sampling a range of contexts and associated structures, we could better understand their function and date.

Operation 4

Operation 4, focused on a circular foundation brace Structure N10W1-2, is located on a slightly elevated bedrock outcrop 5 m south of a conical mound, Structure N10W1-1 which anchors the southern edge of the main plaza of Parcela Escolar. In addition to the areal excavation of the circular structure, the intervening area between the two structures was excavated to explore the stratigraphic relationship between the two.

Structure N10W1-2 consists of a ring of uncut stones with a diameter of 5.5 m. While some of the wall stones had toppled on their faces due to the action of roots of a large tree, there were no other large stones either inside the structure or immediately outside that might have derived from the foundation brace (Figure 226). This suggests that the foundation wall for this structure was never more than a single course tall and did not exceed a height of 50 cm. No trace of mortar was encountered. Given the large gaps between stones, it is possible that the foundation brace was dry laid construction without use of any mortar. Bedrock was visible over much of the area within the foundation brace. Most of the stones of the foundation brace were in direct contact with the bedrock. Owing to the slope of the bedrock, in places the tops of the wall stones were lower than the bedrock exposed in the center of the structure.

Structure N10W1-1 consists today of a 3-m-tall conical mound with a diameter of 20 m. No extant *in-situ* wall lines or facing stones are visible, with the surface stones consisting of unconsolidated unworked dry core rubble. As such, it was neither possible to determine the shape or orientation of the structure. Subsequent excavation revealed two stairs oriented east-west. In the center of the exposed stair the east face of the blocks were smoothed in addition to the south faces. This corresponds to what had formerly been the end of the stairs. These stairs were subsequently extended to the east, though the secondary construction was of inferior quality with the stones being less well-shaped, and the alignment being set back 5 cm from the original stairs.

Operation 4 impacted an area of 5x13 m, and included Structure N10W1-2 in its entirety, the area between it and Structure N10W1-1, and a two meter extension to the south of Structure N10W1-2. The area within the circular structure was divided into quadrats of approximately equal size (Lots 1, 2, 5 and 6), while the area outside was divided into eight lots of varying size and shape. The excavation of alternating lots permitted a continuous profile bisecting the circular structure and continuing north to

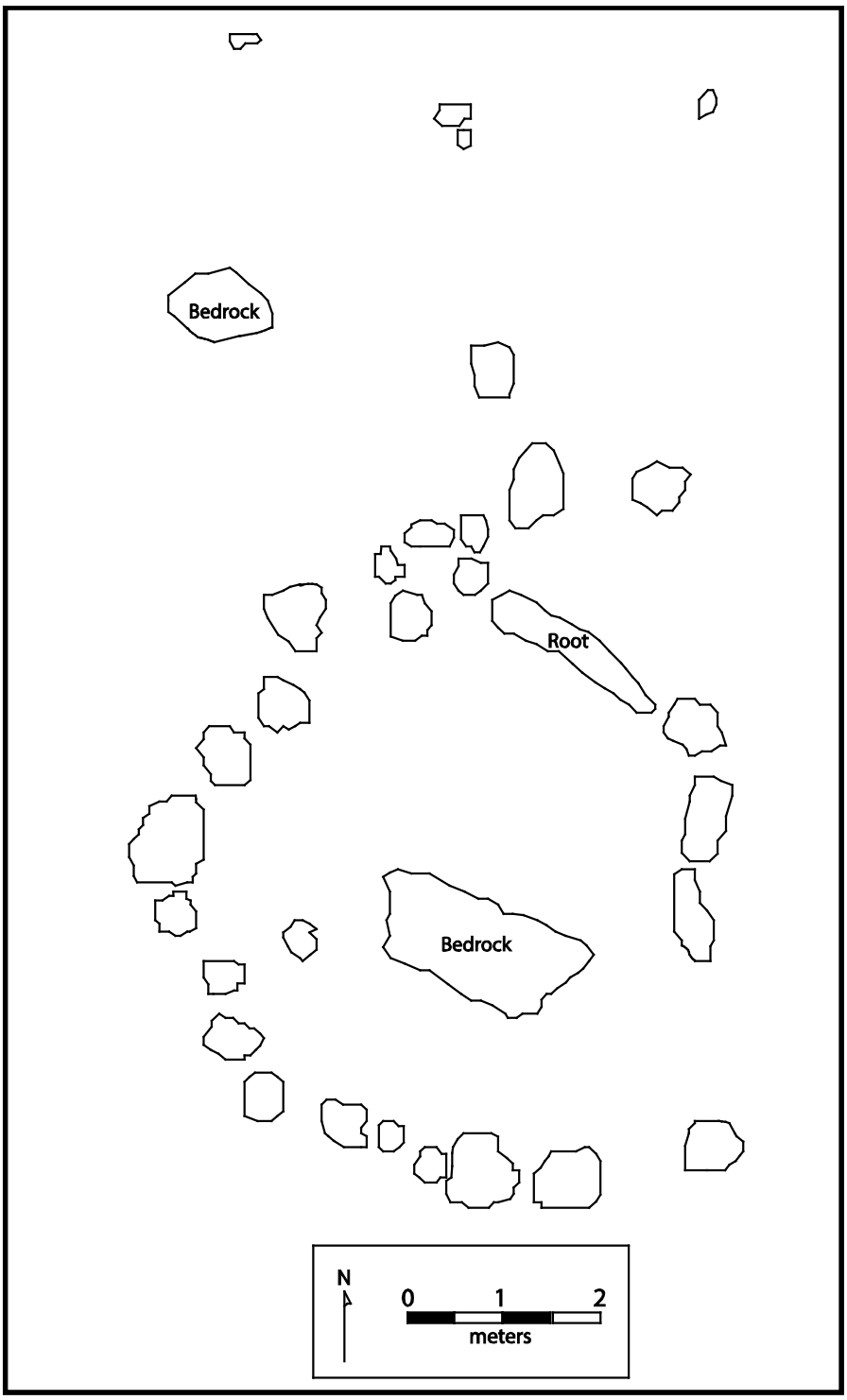


Figure 226. Parcela Escolar, Structure N10W1-2, Surface

intersect with the conical mound. This made it possible to stratigraphically compare the two structures and check for contemporaneity (Figure 227).

Level 1 consisted of the material from the surface to the next change in matrices. Within the circular structure, and to the south, this lies directly over bedrock and consisted of 10-20 cm of black (10YR 2/1) soil with the occasional irregular cobble-sized inclusion. In Lots 3 and 7, it was much the same, though somewhat deeper and in places overlying pockets of *chac luum* (iron-rich red clay). In Lots 4 and 8, Level 1 comprised much less of the dark soil, and correspondingly more stones. The latter had slumped downslope from the conical mound, burying the stairs at its feet, and the partially preserved floor immediately south of Structure N10W1-1. Apart from the floor that supported the conical mound, no features were encountered, either within the circular structure, or outside of it. The lack of any *chich* (gravel) subfloor within the circular building implies that this structure never contained a prepared floor. Indeed, the exposure of bedrock in the center of the structure suggests that whatever material may have been brought to this location was for the purposes of raising the perimeter height up to that of the bedrock.

The ceramics from Level 1 were few in number and poorly preserved. The identified types pertained to the Terminal Classic, with a few sherds from earlier periods admixed. No specialized types or forms were exclusive to the circular structure. The ceramic density within that building and immediately surrounding it was very low, ranging from 0 to 1 sherd/ sq m. The lots immediately adjacent to the conical mound had higher sherd densities ranging from 3-6 sherds/sq m.

Level 2 (Figure 228) consisted of the *chac luum* that existed in the bottom of solution pits north of N10W1-2 and red powdered silty clay overlying the stairs of Structure N10W1-1. The latter may have been the decomposed remains of a *kancab* plaster, though no true plaster fragments were encountered over the stairs. In front of the stairs, this level rested on top of a plaster floor (Floor 1).

No ceramics were recovered from Level 2. While this might have been expected given the small areas composed of the material in the solution pits, it was somewhat unexpected from the area over the stairs, as the previous level had yielded a fairly large ceramic sample. One explanation might be that the matrix from above the stairs is indeed decomposed *kancab* mortar, and that this material was kept deliberately sherd free in order to guarantee a smooth finish.

Level 3 was present only near Structure N10W1-1, and consisted of the plaster of Floor 1 and its subfloor gravel ballast. Floor 1 was preserved up to 2 m south of the stairs of N10W1-1. Unfortunately, in order to guarantee that stability of the bottom stair of this structure, we halted excavation 70 cm short of the lowermost stair. This did not permit us to explore the relationship between the stair and the floor. Floor 1 consists of 10 cm of pinkish plaster over 30 cm of gravel and cobble sized limestone ballast. The level was divided into sealed and unsealed lots.

With the exception of three sherds from the unsealed portion of the floor, all of the identified ceramics from Level 3 were dated to the Late Formative. This would suggest that Floor 1 also dated to this period.

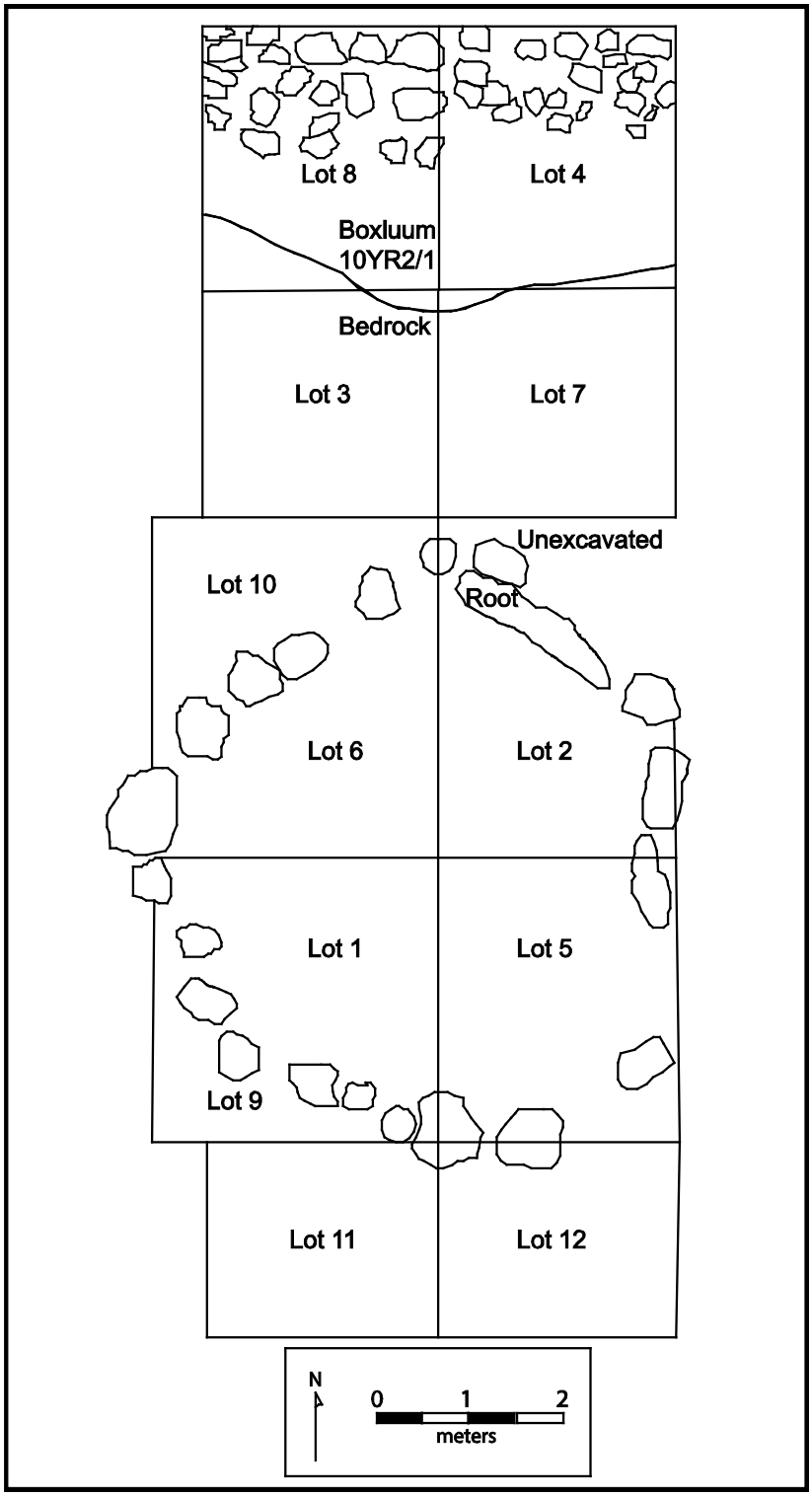


Figure 227. Parcela Escolar, Structure N10W1-2, Level 1

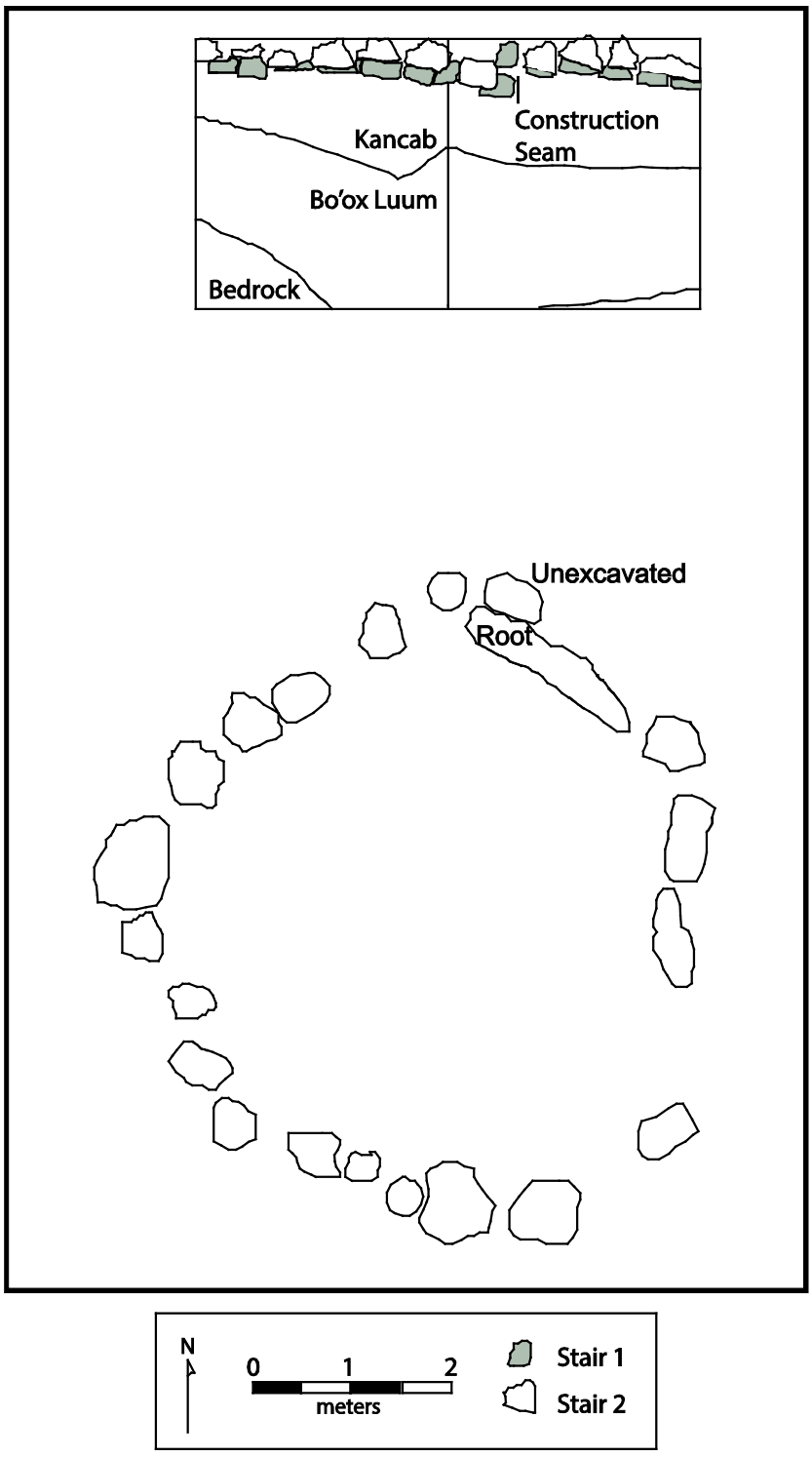


Figure 228. Parcela Escolar, Structure N10W1-2, Level 2

Level 4 (Figure 229) was also only present near Structure N10W1-1, and consisted of dark brown silt overlying bedrock and *chac luum*. Occasional large irregular stones were included in the matrix. This does not appear to be an anthropogenic deposit, as the stones are infrequent and unsorted. As this deposit underlies Floor 1, it probably represents the original natural soil level for this locality.

Very few sherds were recovered from Level 4. These consisted entirely of types dating to the Late Formative period. This is in accordance with the sample recovered from the floor fill, suggesting that the original occupation and construction at this part of Parcela Escolar dates to the Late Formative.

Level 5 (Figure 230) consisted of the *chac luum* that was concentrated in solution pits within the bedrock immediately south of N10W1-1. Like the *chac luum* from Level 2, Level 5 is essentially culturally sterile. Only a single sherd was recovered. That sherd also dated to the Late Formative.

Operation 5

Operation 5 was also an areal excavation focused on a circular structure located at the southern margins of Parcela Escolar. Structure N8E1-1 consists of a single course foundation brace of unmodified stones set vertically. No trace of lime mortar was encountered between the extant stones of the foundation brace. This suggests that either mortar was not originally present, or that the original mortar was a more fugitive *kancab* mortar. The structure has a diameter of 5 m. and a height of 40-50 cm. but is poorly preserved, with some stones having fallen on their face, and a section in the southwest quadrant missing. Because of this, it is not possible to determine if there was a formal entrance to the structure. It was constructed on top of a round platform, N8E1-1-sub, measuring 6 m across and 20 cm high. While our mapping of the site had shown Structure N8E1-1 to be relatively isolated, a pathway cut this season to give access to the structure revealed a second round structure 8 m to the east. Both structures occupied the summit of a bedrock outcrop with large depressions located to the northeast and southwest. These depressions contain relatively deep and fertile *kancab* soils, and would have been good candidates for gardens in the past. A large block-style *metate* (corn grinder) was located adjacent to the northeast side of Structure N8E1-1-sub. Fragments of a second *metate* were also encountered in this locality (Figure 231).

Operation 5 impacted an area of approximately 62 sq m. Four lots (1-4) were excavated within the round structure, while a further 5 lots of varying size and shape were excavated outside of the structure to help to define it, and to provide a control sample against which the structure's contents could be compared. The units were excavated in alternating units so that a continuous profile could be produced showing the relationship between the foundation brace and the platform.

Level 1 (Figure 232) consisted of the material between the ground surface and the first break in sedimentary units. There was a major distinction in the nature of the sediment between the material excavated within the structure and the material from outside it. Within the walls, the matrix was black silt (10YR2/1) averaging 20 cm in thickness with graded stones ranging from cobble sized at the bottom of the level to gravel sized at the top. This graded stone sequence is typical of a *chich* layer of ballast used to support a plaster floor. No plaster was encountered

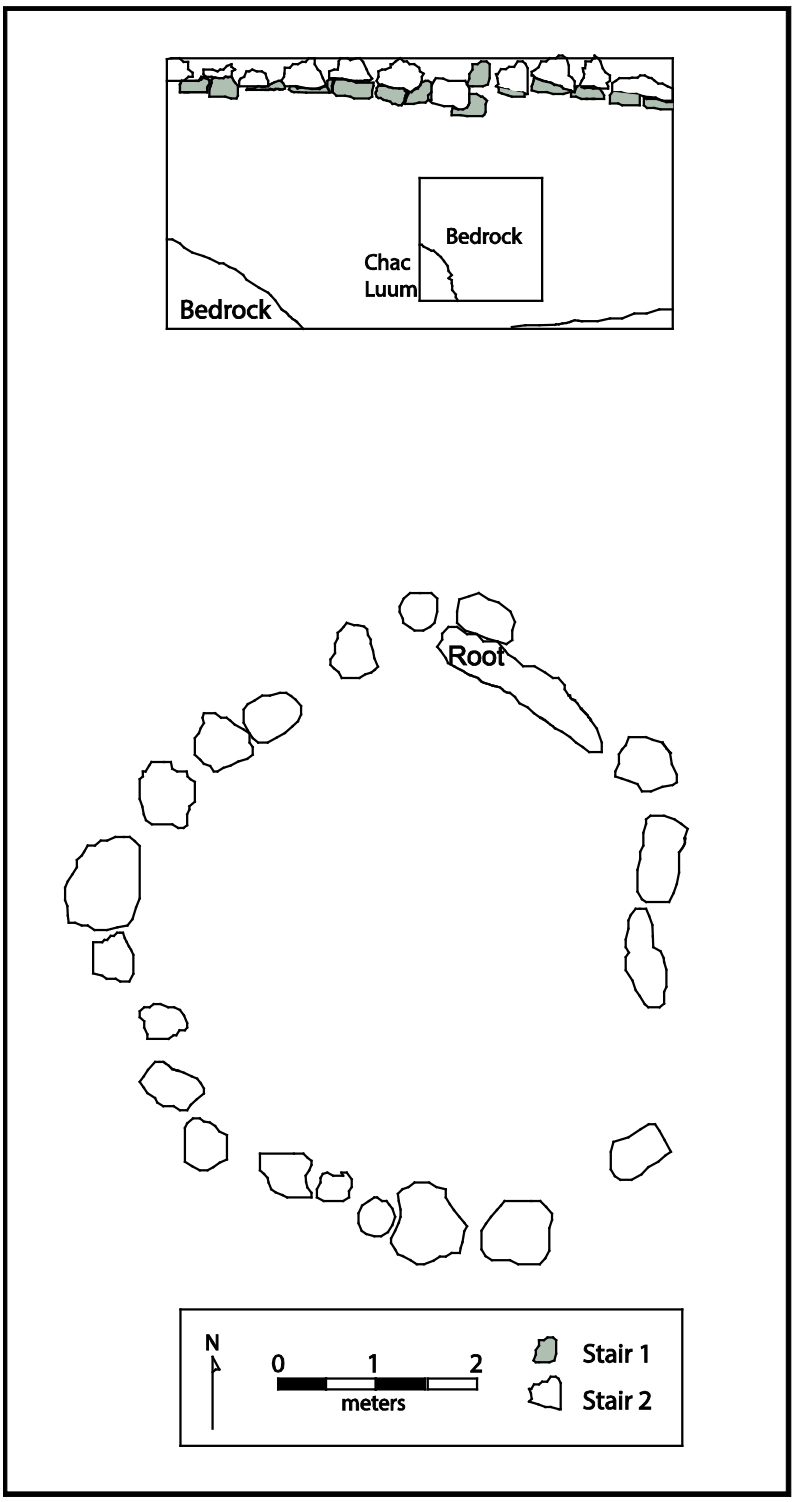


Figure 229. Parcela Escolar, Structure N10W1-2, Level 4

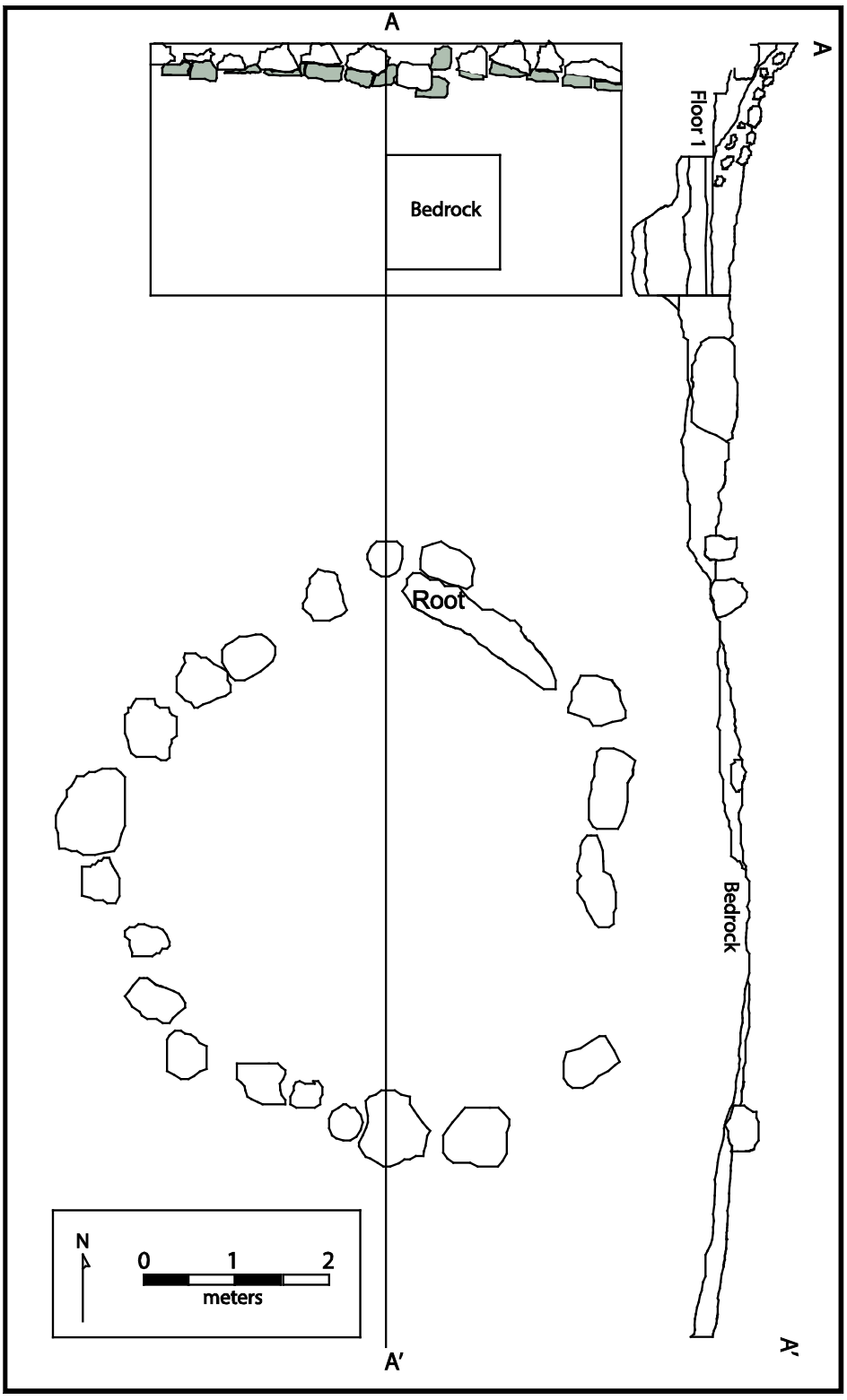


Figure 230. Parcela Escolar, Structure N10W1-2, Level 5

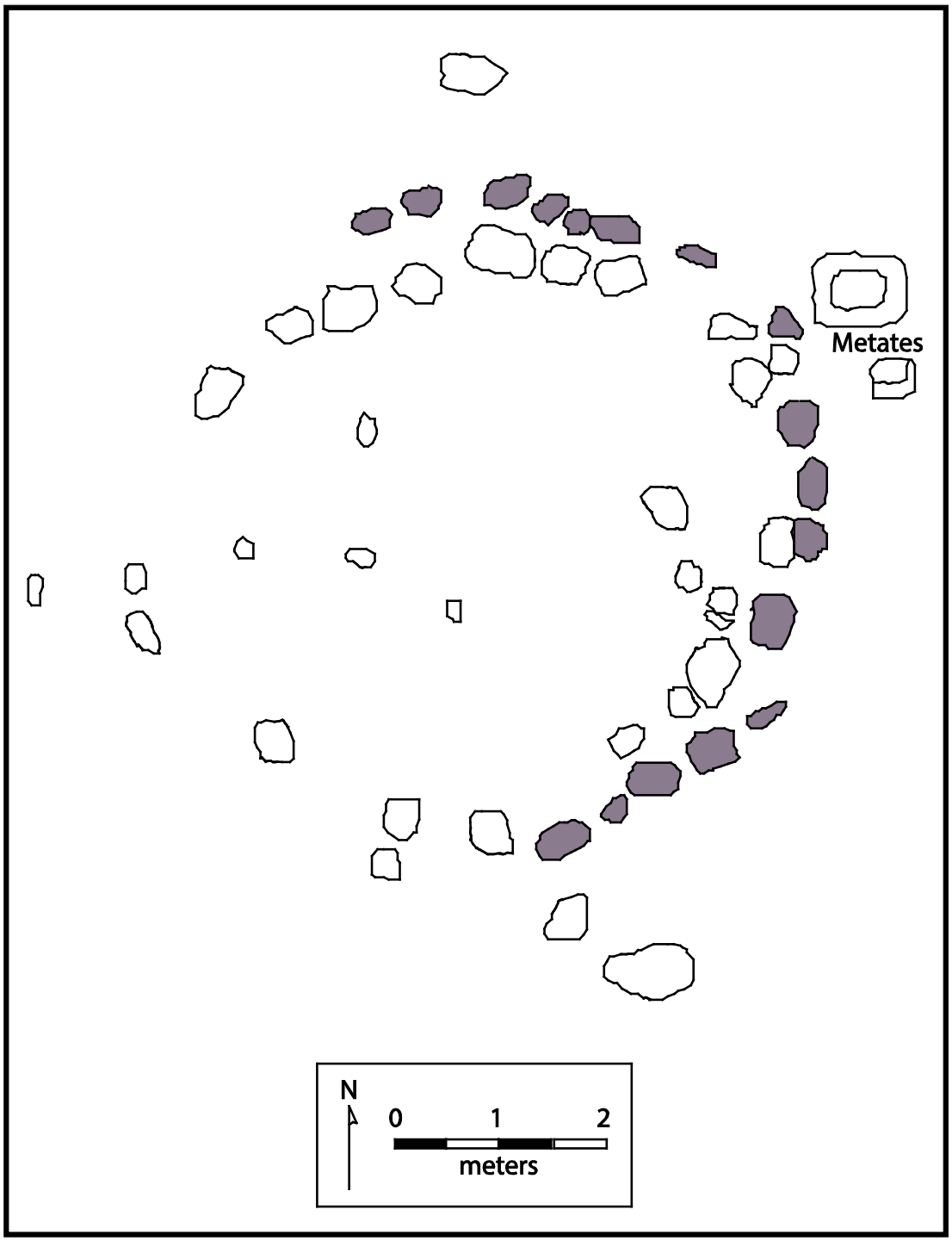


Figure 231. Parcela Escolar, Structure N8E1-1, Surface

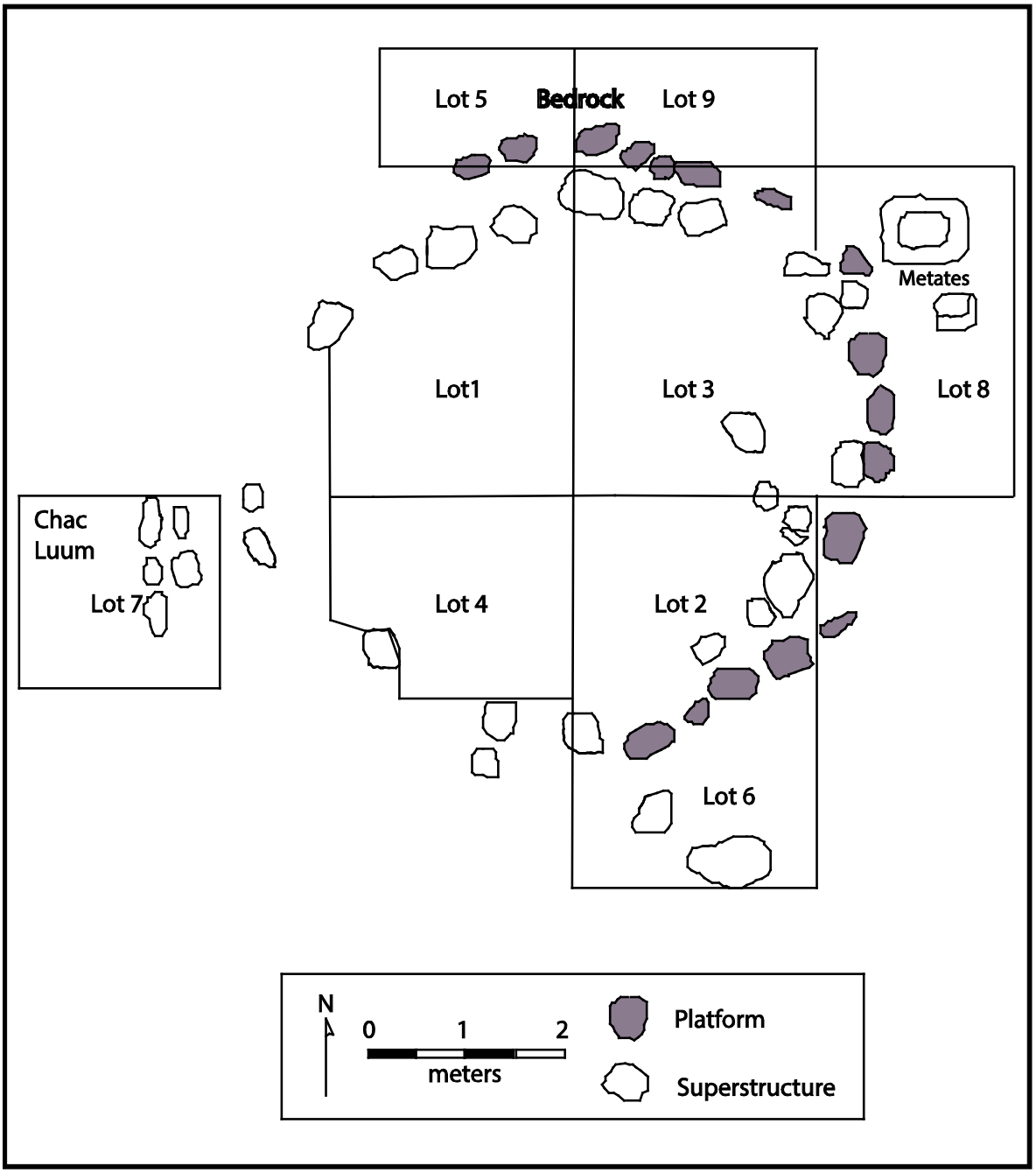


Figure 232. Parcela Escolar, Structure N8E1-1, Level 1

however; either during excavation, or in the screens. This may be a function of the complete destruction of the plaster as a result of exposure at the surface to the elements. Alternatively, it may suggest that the finished floor was produced with packed clay instead of plaster. Because of the absence of a floor, it is difficult to conclude with certainty whether the ceramics from this level were the result of activities performed on the surface, or as a result of initial construction of the surface. No features were observed within the structure. Outside the walls, the matrix was similar, though the inclusions were not. With the exception of Lot 6, very few stones were encountered outside the structure. This suggests that much of the material outside of the structure accumulated primarily through natural processes. The area to the south of the structure had stone in the same density as within it, suggesting an anthropogenic deposit. This may have been an attempt to construct an access ramp, or perhaps a small patio or activity area. Unfortunately, or unit was too small to determine the extent of the stone-bearing deposit, or its shape. Inside the structure, Level 1 continued to the base of the wall of the foundation brace, where it encountered another surface. Outside the walls, Level 1 was taken to the base of the platform stones except for west of the structure, where excavation proceeded through Level 2 to bedrock.

The recovered ceramics from Level 1 also indicated a difference between the material from inside the superstructure and the material outside the substructure. Outside the platform the ceramics dated exclusively to the Terminal Classic period, while inside the superstructure there were ceramics from the Early Classic in addition to those from the Terminal Classic. This suggests that ceramic material from an Early Classic context (likely a midden) had been mined for material which was incorporated as fill for the floor. The ceramic differences also extended to notable differences in frequency between the two contexts. Within the structure the Terminal Classic ceramics were relatively abundant, averaging 11.8 sherds/sq m and ranging between 7.4 and 19.6 sherds/ sq m. Outside the structure, the ceramic frequency was much lower, averaging 2.5 sherd/sq m and ranging from 1.5-3.75 sherds/sq m. This might suggest that N8E1-1 might have been the center of an activity that involved ceramics. Alternatively, the ceramics from this deposit may have originated elsewhere at the site, and became incorporated as fill material. The most common type represented within the structure was Yokat striated, with over 60 percent of the identified sherds pertaining to this type. This figure is twice as high as from the site as a whole, and assuming no biasing factors in the sample, may suggest that there is a relationship between that type and the round structure. Yokat Striated occurs in a single form: low necked jars. The frequent discoloration or scorching of the bottoms of these vessels suggests that they were placed in direct contact with a fire, and were thus involved in food preparation. However, the absence of any feature such as a hearth from inside the superstructure would eliminate the production of foods within the structure itself. Perhaps the vessels were stored here while preparation of foods took place beyond the area tested.

Level 2 was restricted to two lots (Figure 233). Lot 1 was a 2x2-m-unit west of Structure N8E1-1. The matrix was the red iron-rich soil 2.5 YR 4/6 (*chac luum*) found immediately over bedrock. Very few stones were encountered within this deposit. Lot 2 was a 1.75 x 2-m unit in the southwest quadrat of the structure. This level was much the same as level 1 in that it represented an artificially constructed surface 10 cm in thickness. In this case it represents the fill of the platform (N8E1-1

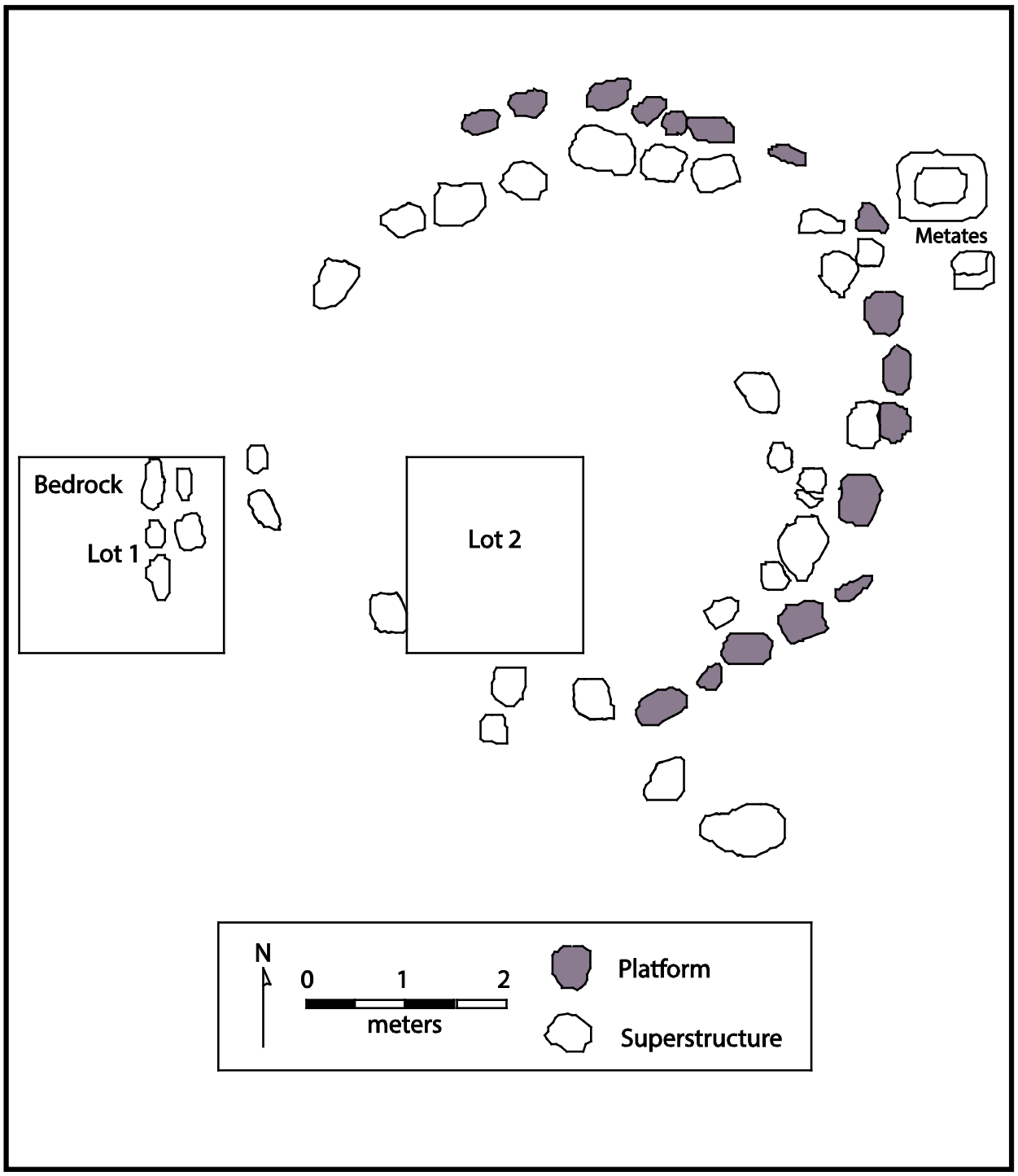


Figure 233. Parcela Escolar, Structure N8E1-1, Level 2

sub). The matrix is a dark brown (10YR2/2) sandy silt (*box luum*) containing a graded sequence of stones running from cobble size to grave size. Like the previous level, no evidence of a plaster surface was encountered, despite it being protected by the levelling event that covered it.

The ceramics from both lots of Level 2 dated to the Terminal Classic period, though they included some Early Classic types admixed into the deposits. The high relative frequency of unidentified ceramics from Lot 1 suggests that the ceramics did not result from in-situ deposition. Within Lot 1, the sherd density for Lot 1 was 225 sherds/cu m. In comparison the sherd density from Level 1 immediately above was 216 sherds/cu m. This suggests that the sherds from the fill of the substructure and the superstructure both derived from the same source midden material incorporated into the construction fill, and did not result from activities carried out within the structure.

Only a single lot of Level 3 was excavated; within the southwest quadrat of N8E1-1-sub 1 (Figure 234). This matrix was dark grey sandy silt (*sacaluum*) with high lime content. The matrix contained many irregular limestone boulders, and represents an anthropogenic construction episode. The lack of a *chich* level at the top of this deposit suggests that this construction was probably partially razed to permit the construction of the circular platform that was built over it. A cache (Cache 1) was encountered along the north wall of the unit. The cache consists of a Xanaba Red basin covered by an inverted Xanaba Red bowl. The bottom third of the basin was filled with fine lime powder and rootlets. This material was wet-screened in the lab for carbonized material, but none was recovered. No residue was present on the vessels. Since this cache was in direct contact with the bedrock, it likely represents a dedicatory deposit. Large rocks were carefully placed around the cache to produce a void, which was capped by a tabular stone. The bedrock here is quite irregular, but somewhat higher than the bedrock exposed to the north and west of N8E1-1, and so this may have contributed to the siting of this construction episode.

The ceramic sample from Level 3 was small, but exclusively Early Classic in date. This is in accord with the Xanaba vessels from Cache 1. As a result, we can date the initial construction at this locality to the Early Classic Period, making it the first such construction for this period identified at Parcela Escolar.

Interpretation

Operation 4 showed evidence of construction from two periods: the Late Formative, and the Terminal Classic. The Late Formative saw a floor raised 30 cm above the ambient soil level. It is quite likely that the roughly shaped steps encountered at the south edge of Structure N10W1-1 also date to this period. A second construction phase within the Late Formative involved extending these steps to the east. During the Terminal Classic Period, a small bedrock outcrop was chosen as the locality for the construction of a low circular foundation brace. This was a rather informal construction, as there was no evidence of a floor, and the wall was not of uniform height or thickness. It is possible that further construction also continued at the site of Structure N10W1-1, accounting for the large pile of unconsolidated stone; however our excavations did not extend into this area.

Operation 5 also displayed evidence of two periods of construction: the Early Classic and the Terminal Classic. The Early Classic is represented by a construction

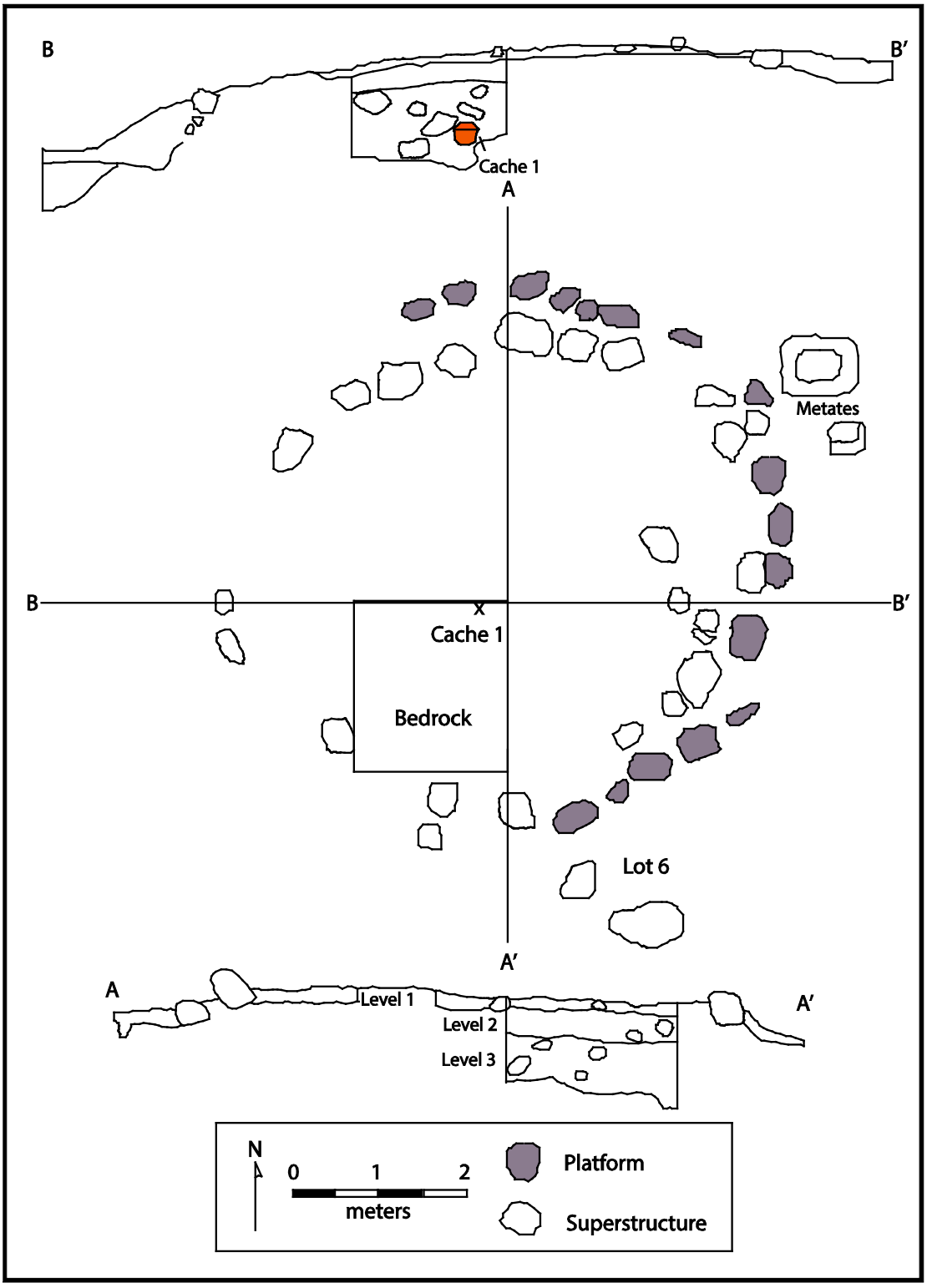


Figure 234. Parcela Escolar, Structure N8E1-1, Level 3

event which raised the level of the surface at least 70 cm above the bedrock. Though this effort was accompanied by a dedicatory cache, the limited nature of our deepest excavations did not permit our discovery of the horizontal extent of this deposit. During the Terminal Classic, the surface of the Early Classic structure was leveled, and a new building was constructed in this locality. This consisted of a circular platform 30-40 cm in height that supported a circular foundation brace.

Part 3: The *Ejido* of Sacalaca

Chapter 30: Sacalaca, Structure N5E6-4, Operation 5

Dave Johnstone, J. Pablo Huerta Rodriguez, and Leslie Reyes

Operation 5 was excavated as part of a larger project problem focused on circular foundation braces that seemed to date to late in the Terminal Classic. The operation was focused on Structure N5E6-4, a foundation brace located in the center of a raised patio 2.5 meters in front of a tandem plan residential foundation, Structure N5E6-5. The operation was designed to explore the relationship between these two structures as a means of identifying a possible function for these circular foundation braces. To this end, we excavated the circular structure in its entirety, as well as a 5-m-wide area between the two structures in the hopes of establishing a stratigraphic relationship between the two structures.

Structure N5E6-4 consists of a ring of stones 5 m in diameter. For the most part, the intact foundation consisted of a single course of uncut stones. Four possible reused stones that had been shaped were encountered within the foundation brace. Two places in the wall had stacked stones suggesting at least another course was likely. The volume of collapsed stones within and immediately outside of the structure was sufficient for a third course, which would have brought the wall to a height of 1.2 m. A gap in the eastern portion flanked on the south by a recycled cut stone may have served as an entrance (Figure 235). Neither between the extant courses, nor between the rocks within the bottom course, was any concrete or lime mortar encountered. This suggests that the wall was either dry laid, or set in a mud mortar.

Structure N5E6-5 is a rectangular structure at least 10 m in length oriented east-west. Our excavation only exposed a single stair on the south side of the structure facing the open patio. This stair was constructed of stones that were roughly shaped so that the riser presented a flat vertical face. All other surfaces were unshaped. No trace of plaster or concrete was encountered, suggesting that the structure had employed a *kancab* (iron rich clay) mortar.

The excavations covered an area of 5 x 7.5 m. Eleven lots of varying size and shape were excavated in Level 1. As part of the goal of identifying the function of this class of structure, it was important to sample the area within the structure separately from the surrounding area. Accordingly, the interior of the structure was divided into quadrats (Lots 1, 2, 4, and 5), while the remainder were located immediately outside it, or between it and Structure N5E6-5. Excavation proceeded in alternating lots through to bedrock, in order to produce a continuous profile bisecting Structure N5E6-4 and showing its stratigraphic relationship with Structure N5E6-5.

Level 1 consisted of the material between the ground surface and the base of the lowest course of the respective structures. As such, it should contain material from the construction through the use and abandonment of these buildings. Level 1 consisted of loose organic material overlying unsorted rocks deriving from structural collapse. This material was thickest at the northern portion of the cut, where the raised elevation of the

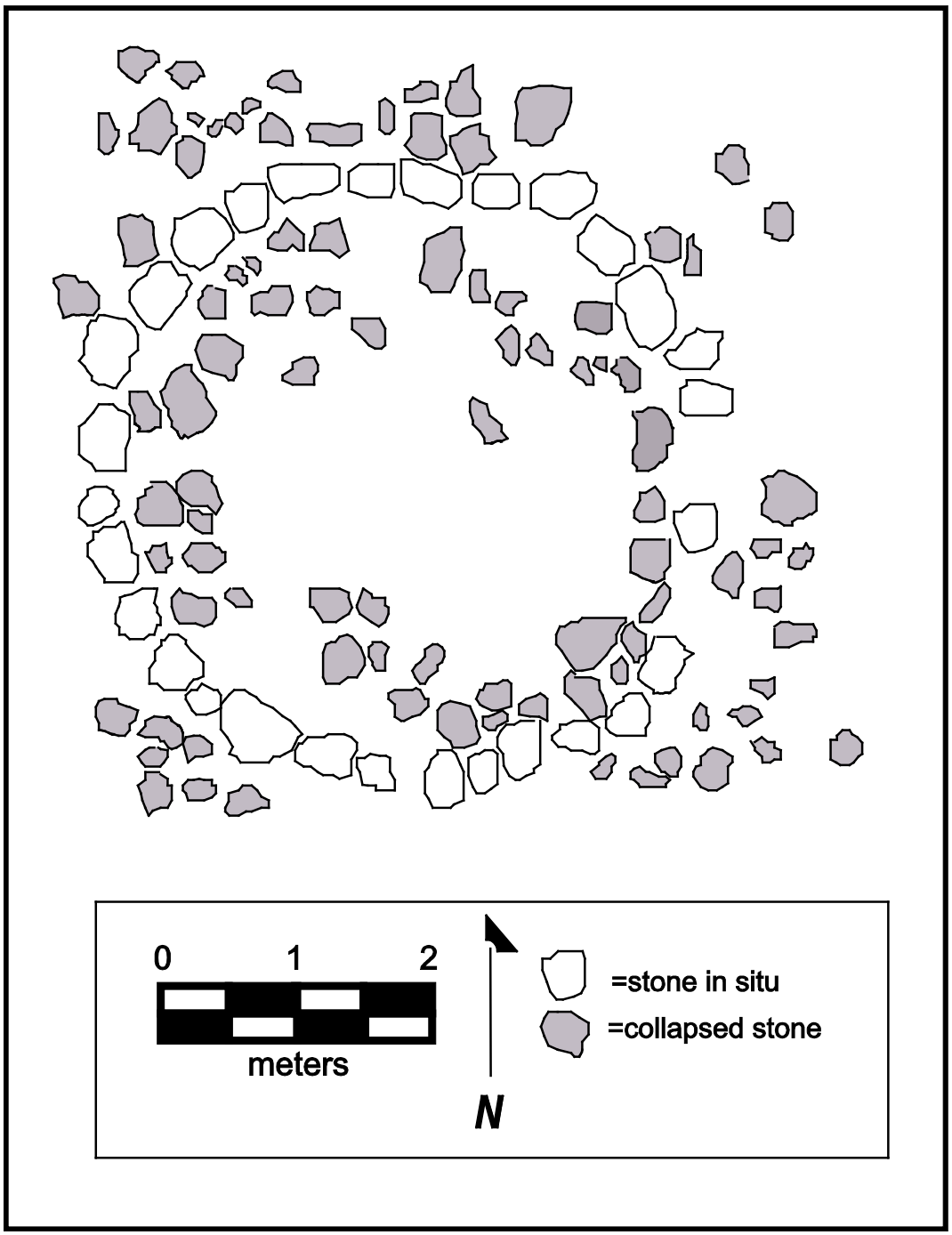


Figure 235. Sacalaca, Structure N5E6-4 (Operation 5), Surface

residence provided a ready source for this material, and was thinnest at the center of the circular structure. A black (10YR2/1) soil had developed between these stones. No features were encountered; either within the circular structure, or outside of it. The surface on which the structures were constructed does not seem to have been a finished one. The surface upon which the structures were built does not have any trace of plaster, or a *chich* (gravel-sized) subfloor. This surface is not level, and slopes down to the southwest. The unfinished sloping floor suggests that the open area in front of N5E6-5 was an informal space (Figure 236).

The ceramics from Level 1 consisted primarily of types pertaining to the Terminal Classic period. The preservation was poor, resulting from the repeated burning of this area in the course of *milpa* farming. There is no difference in types or forms between the ceramic sample from inside the circular structure and the sample from without. The ceramic density from within Structure N5E6-4 averages 12 sherds/ sq m and ranges from 0.3 to 23 sherds/ sq m. The ceramic density from outside the round structure was much higher, averaging 25 sherds/m^2 and ranging from 1-41.6 sherds/m^2.

Level 2 consisted of the material between either *chac luum* (red, iron-rich soil) or bedrock, and the surface upon which Structures N5E6-4 and N5E6-5 were built. Two lots (Level 2, Lots 1 and 2) were excavated (Figure 237). The matrix is a dark brown silty loam containing many large unmodified irregular stones in the boulder- to cobble-size range. In places, these were so tightly packed as to constitute dry core fill, and indicate that this patio is an artificially built level. Occasionally some of the larger stones protrude above the ambient surface on which the structures were constructed. Some of the wall stones of Structure N5E6-4 rest directly on the construction fill.

The latest ceramics from Level 2 date to the Terminal Classic. These tend to be small and poorly preserved. A sizable sample of Middle and Late Formative sherds were also recovered. In contrast, these were larger fragments in a better state of preservation. A coating of lime powder on many of these suggest that these sherds originated from a deposit within a *sascabera*, and that they were subsequently mined and incorporated as fill during the levelling of the platform prior to the construction of either the circular structure or the rectangular residence.

Level 3 consisted of *chac luum* that was concentrated within irregular depressions within the bedrock, and represents the natural ground surface at the time of the first construction at this locality. Level 3, Lot 1 was from below the circular structure, while Lot 2 was excavated from between the circular structure and the rectangular residence. Some cobble-sized, irregular rocks were found within the matrix (Figure 238).

Terminal Classic ceramics continue to be represented even at this earliest level, though some Late Formative sherds were also recovered. The latter were in a poorer state of preservation than similarly dated material from Level 2, perhaps indicating that they had been on the surface and exposed to weathering for a longer period of time.

Despite a continuous stratigraphic section between the two structures, the absence of a prepared plaster floor made it difficult to determine the chronological relationship between Structures N5E6-5 and N5E6-5. Since they both were constructed on the same patio surface, they are at least approximately contemporaneous and date to sometime during the Terminal Classic. The placement of the circular structure less

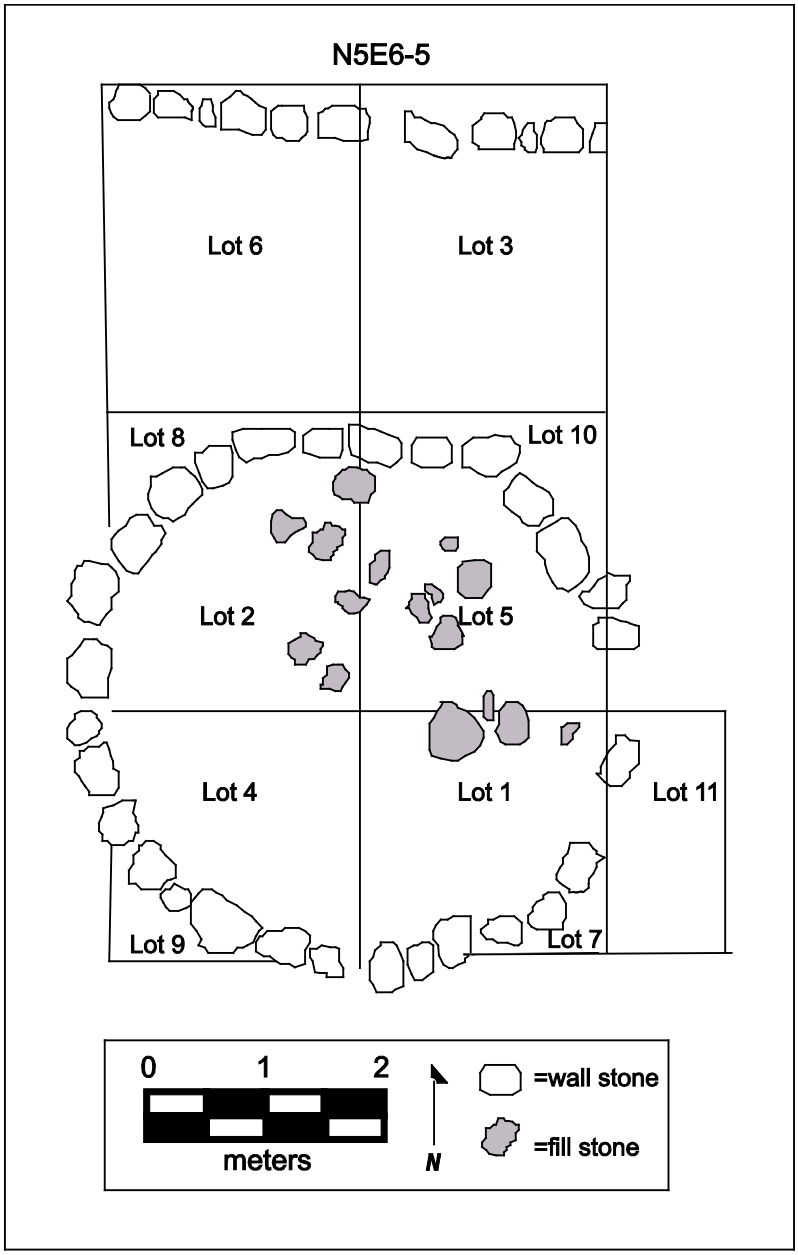


Figure 236. Sacalaca, Operation 5, Level 1

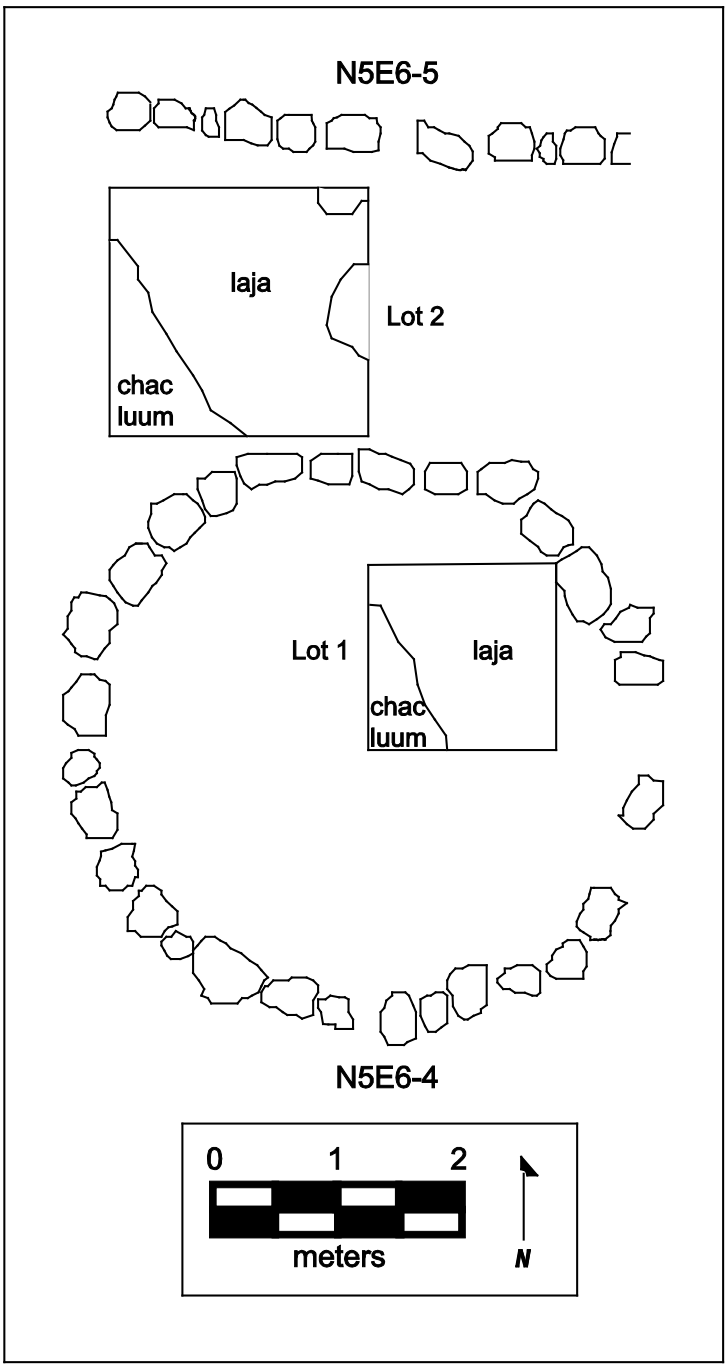


Figure 237. Sacalaca, Operation 5, Level 2

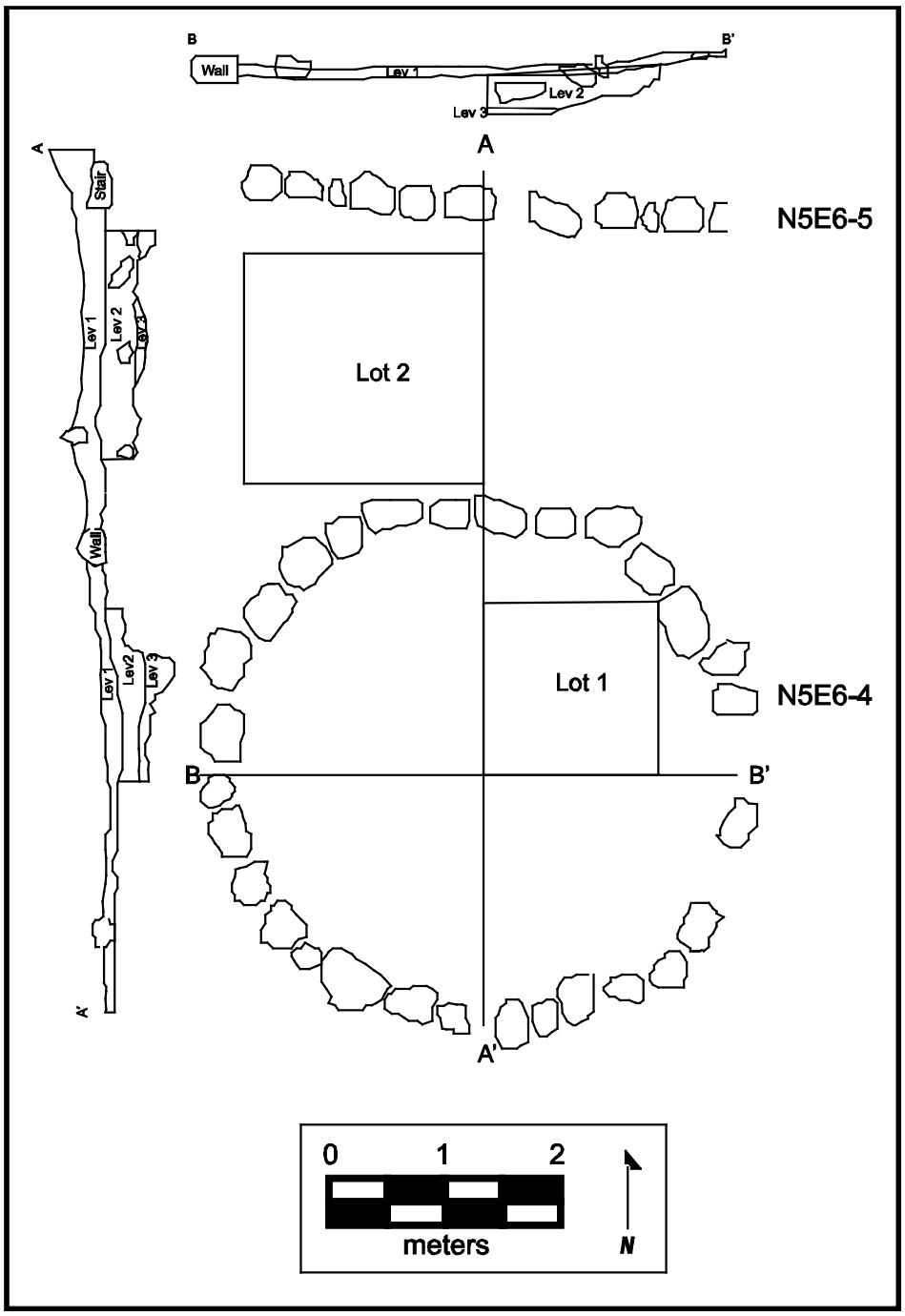


Figure 238. Sacalaca, Operation 5, Level 3

than 3 m in front of and mid-line of the steps leading to the residence would have inhibited easy access to that structure. As there was more than 6 m between the circular structure and smaller ancillary structures to the east and west and a further 2 m of patio to the south, the circular structure could have been situated further away, or off to one side so as not to have blocked access to the principle structure on the platform. This may imply that the residence may already have fallen into disuse when the circular structure was constructed. The scale of our investigations did not permit us to determine if some of the cut stones reused in the circular foundation may have originated in the residence.

Part 3: The *Ejido* of Sacalaca

Chapter 31: San Diego, Operation 1

Karleen Ronsairo

Operation 1 of San Diego was a 2x2m test pit located south of Structure N1E2-3 (Figure 239). The purpose of Operation 1 was to explore the chronology of the area and the activities of the Prehispanic people who occupied this site. Operation 1 consisted of two shallow, natural levels, which will be described below.

After removing the vegetation from the surface, Operation 1, Level 1, Lot 1 consisted of very dark brown (7.5YR 2.5/3) soil with small- to medium-sized cobbles with large rocks resting on top of the surface of the unit (Figure 240). The four ceramics found in Level 1, Lot 1 were unidentifiable. After excavating Level 1, Lot 1, bedrock was exposed in the northwest corner and in the east side of the unit with large rocks in the rest of the unit (Figure 241).

Level 2 of Operation 1 consisted of large rocks with very dark brown (7.5YR 2.5/3) soil and various-sized rocks surrounding them. Level 2 was separated into two lots (Figure 242). Level 2, Lot 1 consisted of exposed bedrock at 5-7 centimeters below surface and large rocks at 0-9 centimeters below surface. The large rocks in Level 2, Lot 1 were removed before changing to Level 2, Lot 2, which consisted of the soil under the large rocks. No ceramics were recovered from Level 2, Lot. The west profile of Operation 1 demonstrates the various-sized rocks and very dark brown (7.5YR 2.5/3) soil excavated in Levels 1 and 2 (Figure 243).

Level 2, Lot 2 consisted of very dark brown (7.5YR 2.5/3) soil under the large rocks that were removed in Level 2, Lot 1. Five identifiable ceramics recovered from Level 2, Lot 2 belong to the Terminal Classic, as evidenced by the Muna Slate type. After excavating and recovering material from Level 2, Lot 2, bedrock in the entire unit was exposed (Figure 244). After cleaning the bedrock, a final photo was taken and the unit was backfilled to its original surface level (Figure 245).

Interpretation

Although no cultural level was encountered in this unit, the presence of small- to medium-sized cobbles, large rocks, and Terminal Classic ceramics indicates that there may have been some type of surface in this area during its occupation. Moreover, the absence of a cultural level, such as a floor, indicates that the settlement area had at least one construction phase, as evidenced by the Terminal Classic ceramics recovered from Operation 1.

Although we have excavated only two units adjacent to two structures at San Diego (Structure N1E1-3 and Structure S1E1-2, see Chapter 32), the data we

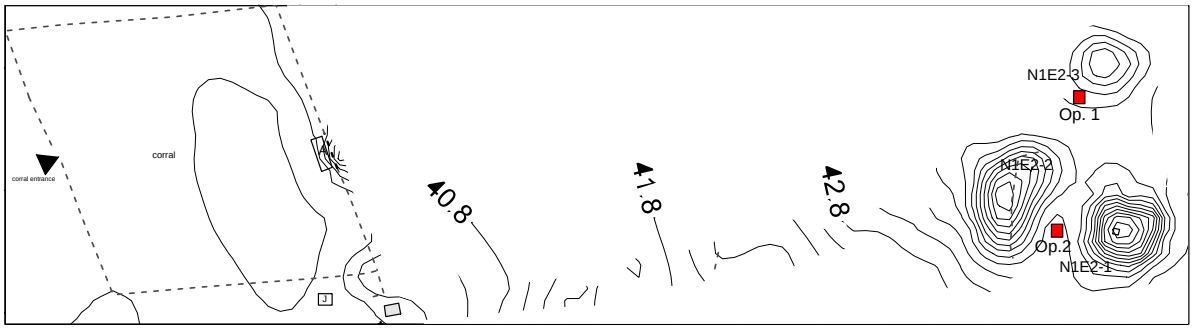


Figure 239. Location of Test Pits at San Diego

Figure 240. San Diego, Operation 1, Level 1, Lot 1

Figure 241. San Diego, Operation 1, Level 2, Lots 1 and 2

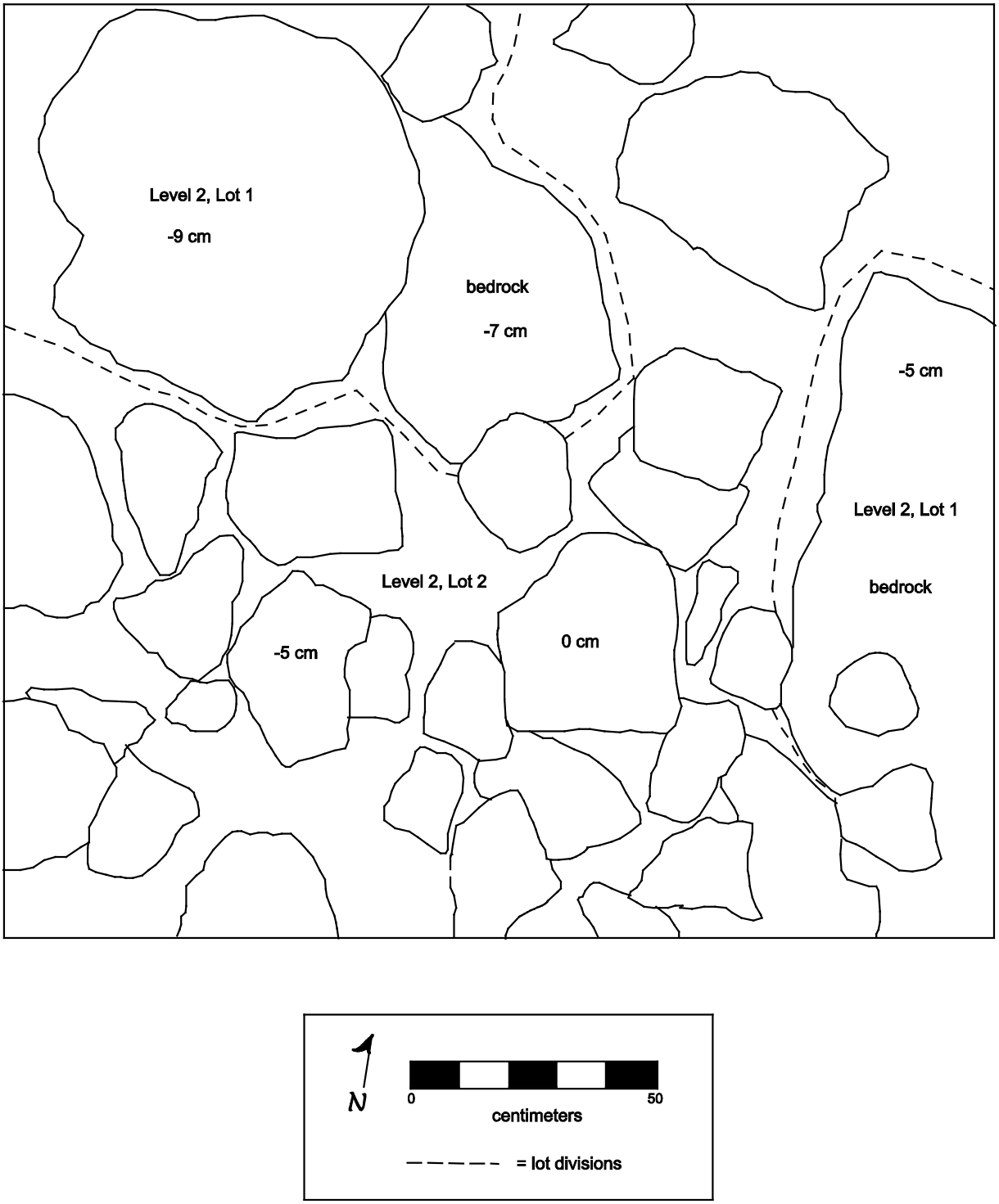


Figure 242. San Diego, Operation 1, Level 2, Lots 1 and 2, Plan Map

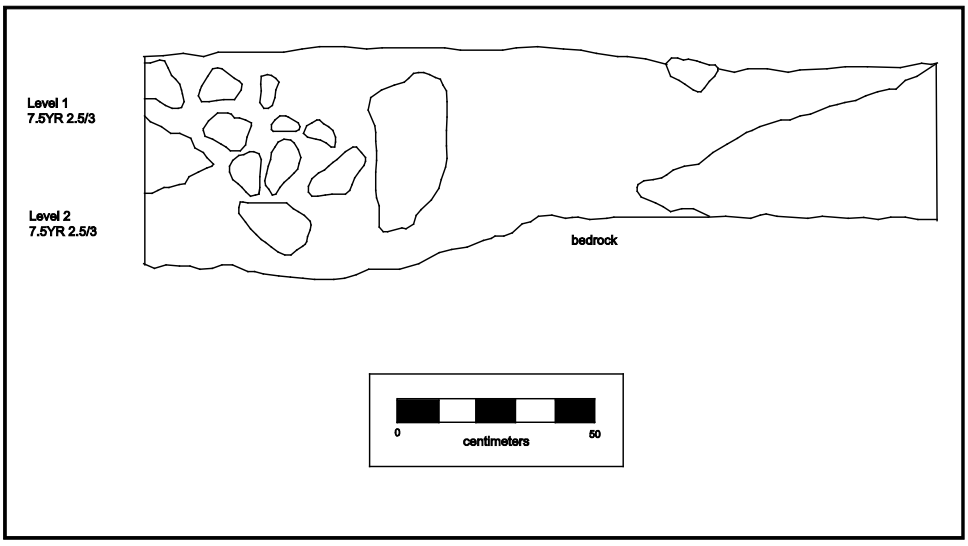


Figure 243. San Diego, Operation 1, West Profile

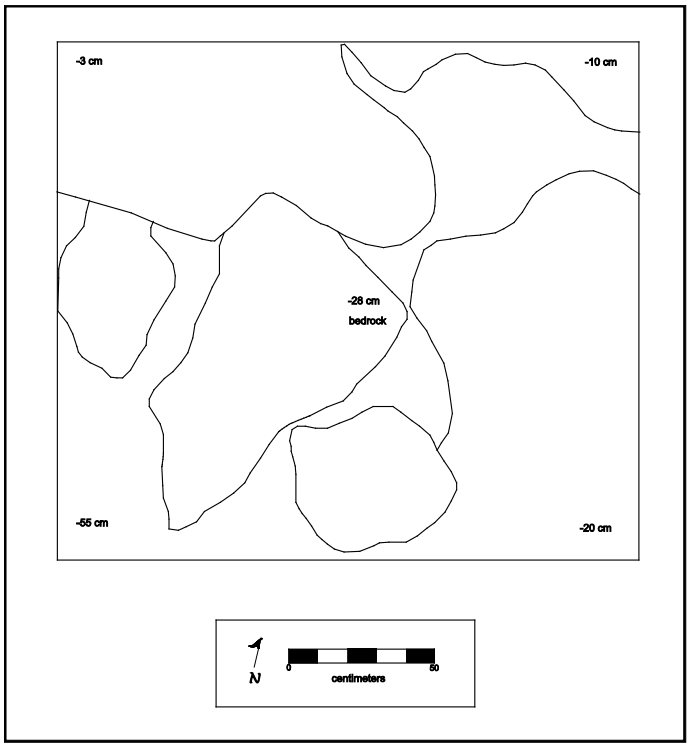


Figure 244. San Diego, Operation 1, Plan at Bedrock

Figure 245. San Diego, Operation 1, Backfilled

recovered from the excavations provide us with a better understanding of the chronology and activities of the Prehispanic people who occupied this site. Further investigations at San Diego will increase our knowledge about the inhabitants and the activities that occurred at this site.

Part 3: *Ejido* of Sacalaca

Chapter 32: San Diego, Operation 2

Jorge Pablo Huerta Rodríguez

This operation was a 2x2 m test pit (Figure 239), located between Structures N1E2-1 and N1E2-2, which are partially built on natural hills. Because we did not know the chronology and characteristics of this settlement, this season we planned to conduct the excavation of two units that could respond, at least partially, to this lack of information.

The surface of the unit was covered by leaves and organic matter, which was removed to establish the excavation (Figure 246). After that, began the excavation of Level 1, Lot 1, which consisted of a layer of a silt-clayey sediment with a dark brown color (10YR 2/2) containing a few stones of about 20x30 cm and some additional gravel (Figure 247).

Although larger stones initially seemed to be forming a sort of alignment, these were actually loose and were not articulated nor were they part of any construction. For that reason, these were removed to continue the excavation of the next level. In this layer only four sherds were found, only one of which was identified and it was of the type Sacalum Black-on-Slate, from Terminal Classic.

Level 2, Lot 1 corresponded to a darker sediment (10YR 3/2), although it was very similar to the previous level (Figure 248). However, in this layer the presence of a larger amount of stones of about 7x10 cm was detected, which were deposited randomly. The removal of this level resulted in the discovery of several larger stones, thus it was changed to a next level. Ceramics from this level were also very few, only 24 pieces, which mostly belonged to the types Muna Slate, Teabo Red, and Yokat Striated var. Yokat, all from the Terminal Classic (see Chapter 40).

Level 3, Lot 1 consisted of a layer of a more reddish color (10 YR 3/6), which contained an abundance of medium and large stones. The excavation of this level revealed that these rocks were directly on bedrock; thus, only the sediment in between the larger stones was removed.

It is noteworthy that, because of their size, these rocks were not moved from its original position (Figure 249). Ceramics that were located on this level consisted of only four sherds, although only one was identified as an example of the type Chancenote Unslipped, from the Late Formative. Once the unit was recorded with drawings and photos (Figure 250), we proceeded with the task of backfilling the test pit to the original ground surface (Figure 251).

Interpretation

This unit failed to locate any deposit of cultural origin, with all corresponding to the natural deposition of sediments. Level 3, Lot 1 corresponded to a level above which was the surface of the ground in the Late Formative period, as evidenced by the presence of a single ceramic piece. This also suggests that the occupation at this time was small or sporadic. Likewise, Level 2, Lot 1 is a natural formation. While there were a lot of pebbles and larger stones in this layer, these were deposited randomly and their presence there was not due to cultural activity. Levels 1 and 2 correspond to the period when the site was occupied during the Terminal Classic.

It is noteworthy that no ceramic evidence of previous or subsequent periods was

found, indicating that this settlement was built and occupied only during this period, which coincides with the history of occupation of many other sites within the study area. Although further evidence is needed and ceramics were very few, the results of the two units excavated helps to identify a few characteristics, such as the seasonal nature of the settlement.

Figure 246. San Diego, Operation 2, Surface

Figure 247. San Diego, Operation 2, Level 1, Lot 1

Figure 248. San Diego, Operation 2, Level 2, Lot 1

Figure 249. San Diego, Operation 2, Level 3, Lot 1

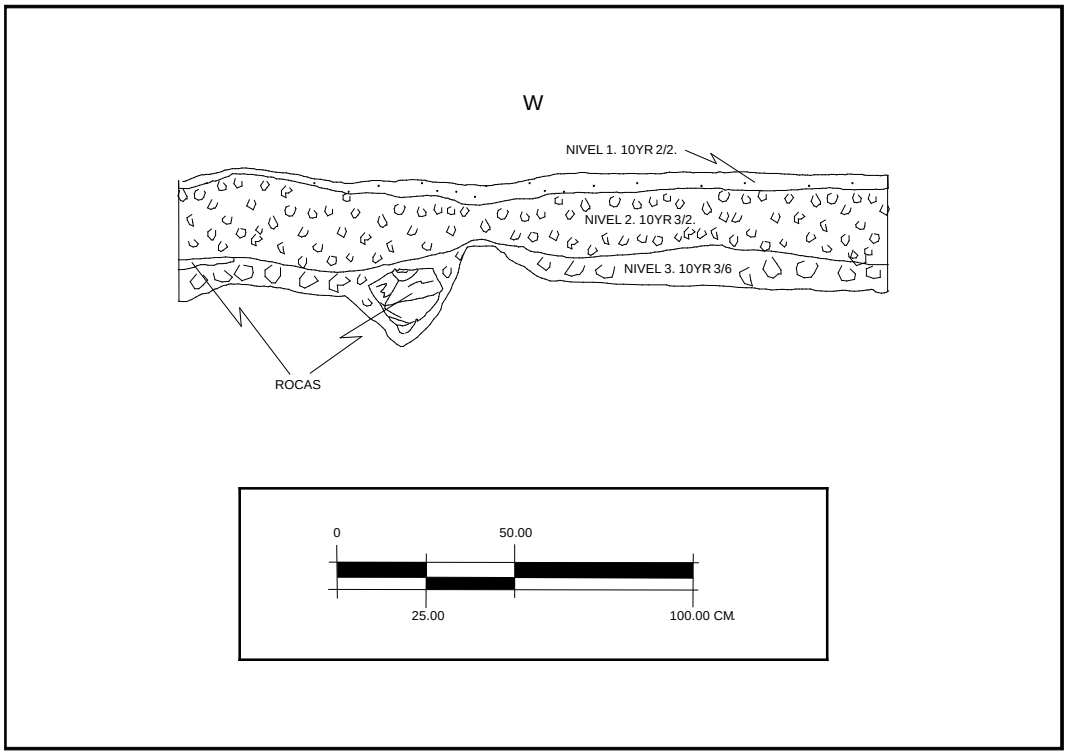


Figure 250. San Diego, Operation 2, West Profile

Figure 251. San Diego, Operation 2, Backfilled

Part 3: The *Ejido* of Sacalaca

Chapter 33: Xbaquil, Operation 1

Karleen Ronsairo

Operation 1 of Xbaquil was a 2x2m test pit located northwest of Structure N1E1-1 at the foot of its summit (Figure 252). The purpose of Operation 1 was to explore the chronology of the area and the activities of the Prehispanic people who occupied this site. Operation 1 consisted of four levels, as demonstrated in the north profile of the unit (Figure 253).

Operation 1, Level 1, Lot 1 consisted of 10-20 centimeters of dark reddish brown (2.5YR 2.5/4) loose soil with very few rocks (Figure 254). The only ceramic sherd recovered from Level 1 is of the Muna Slate type, belonging to the Terminal Classic.

Level 2 of Operation 1 was separated into two lots after a concentration of carved stones was encountered in the west side of the unit at about 8 cm below surface (Figure 255).

Level 2 consisted of dark reddish brown (2.5YR 3/4) soil. Level 2, Lot 1 was excavated until irregular rocks were found from 33-40 centimeters below surface. Following excavation of Level 2, Lot 1, Level 2, Lot 2 was excavated to meet the same level of the irregular rocks in Level 2, Lot 1 (Figure 256). Large root disturbances were found on the west side of the unit below the concentration of carved stones and in the southeast corner of the unit (Figure 257). The ceramics recovered from Level 2 belong to the Terminal Classic, as evidenced by the Yokat Striated var. Yokat, Muna Slate, Sacalum Black on Slate, Tekit Incised, Akil Impressed, Teabo Red, and Ticul Thin Slate types.

Operation 1, Level 3, Lot 1 was excavated after the large root disturbances and the concentration of carved stones from Level 2 were removed. Level 3, Lot 1 consisted of dark reddish brown (2.5YR 3/4) soil, as in Level 2. Level 3, Lot 1 was excavated until bedrock was exposed towards the east side of the unit. Large irregular rocks were found on top of the bedrock and throughout the unit (Figures 258 and 259). The ceramics recovered from Level 3 belong to the Terminal Classic, as evidenced by the Yokat Striated var. Yokat, Muna Slate, and Tekit Incised types.

Operation 1, Level 4, Lot 1 was excavated after the large irregular rocks from Level 3 were removed. Level 4, Lot 1 consisted of dark red (2.5YR 3/6) soil. Bedrock was exposed throughout the entire unit from 51-60 centimeters below surface (Figure 260). The ceramics recovered from Level 4 belong to the Terminal Classic, as evidenced by one sherd of the Yokat Striated var. Yokat type. After bedrock was exposed, the bedrock was cleaned for a final photo (Figure 261) and the unit was backfilled to its original surface level (Figure 262).

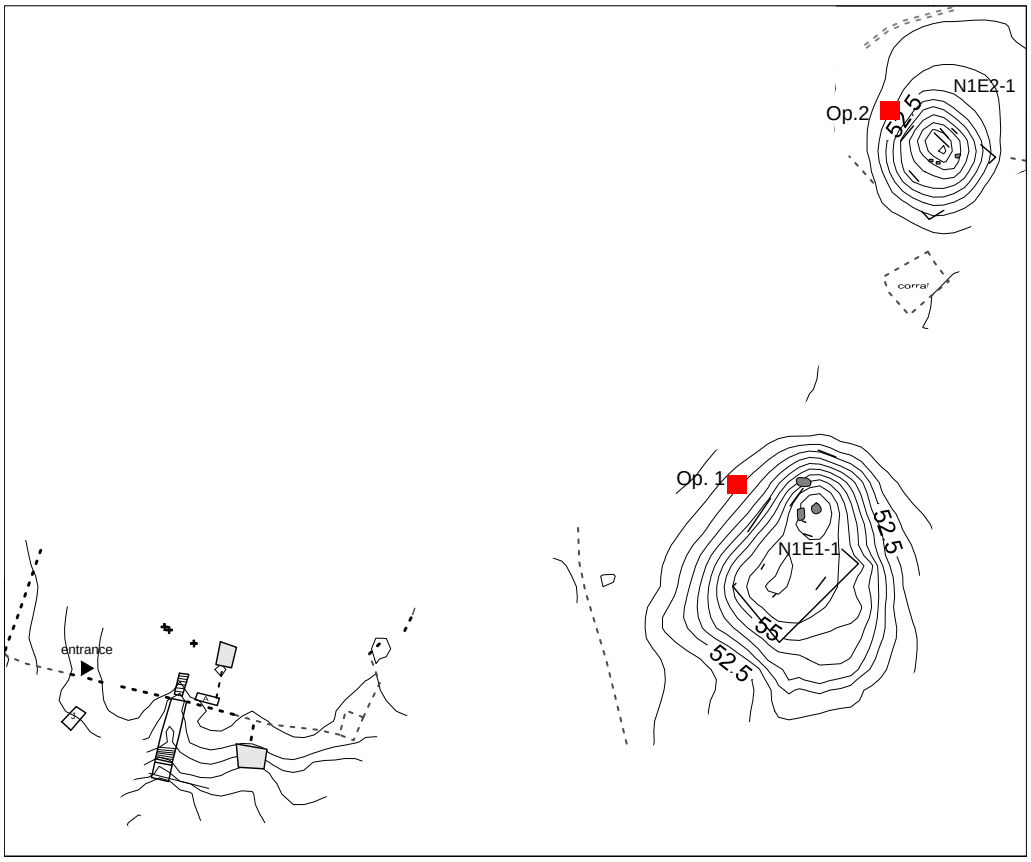


Figure 252. Location of Test Pits at Xbaquil

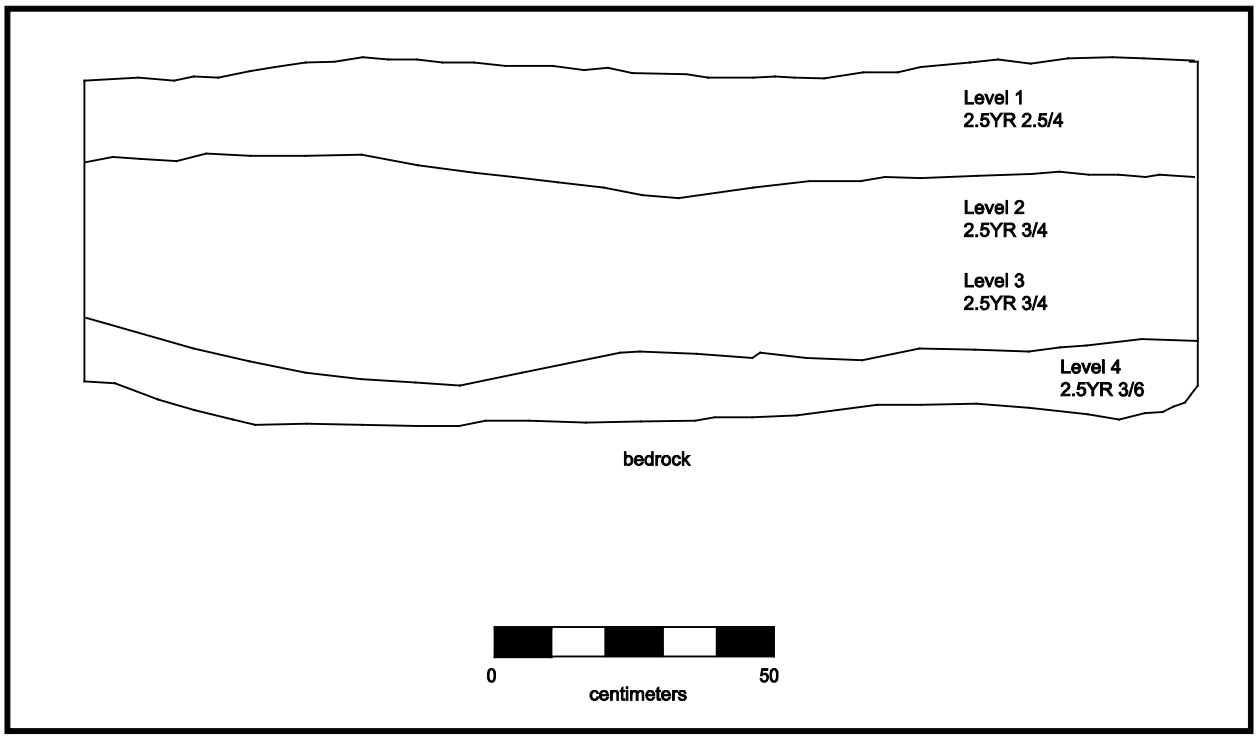


Figure 253. Xbaquil, Operation 1, North Profile

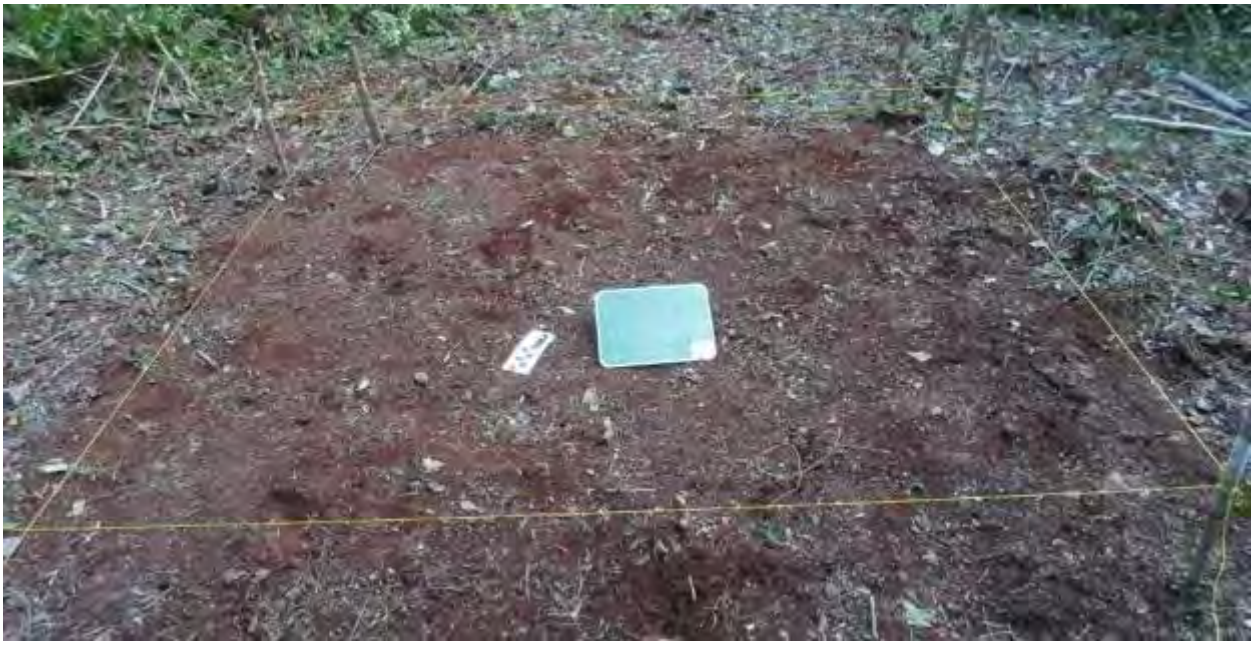


Figure 254. Xbaquil, Operation 1, Level 1, Lot 1

Figure 255. Xbaquil, Operation 1, Level 2, Lots 1 and 2

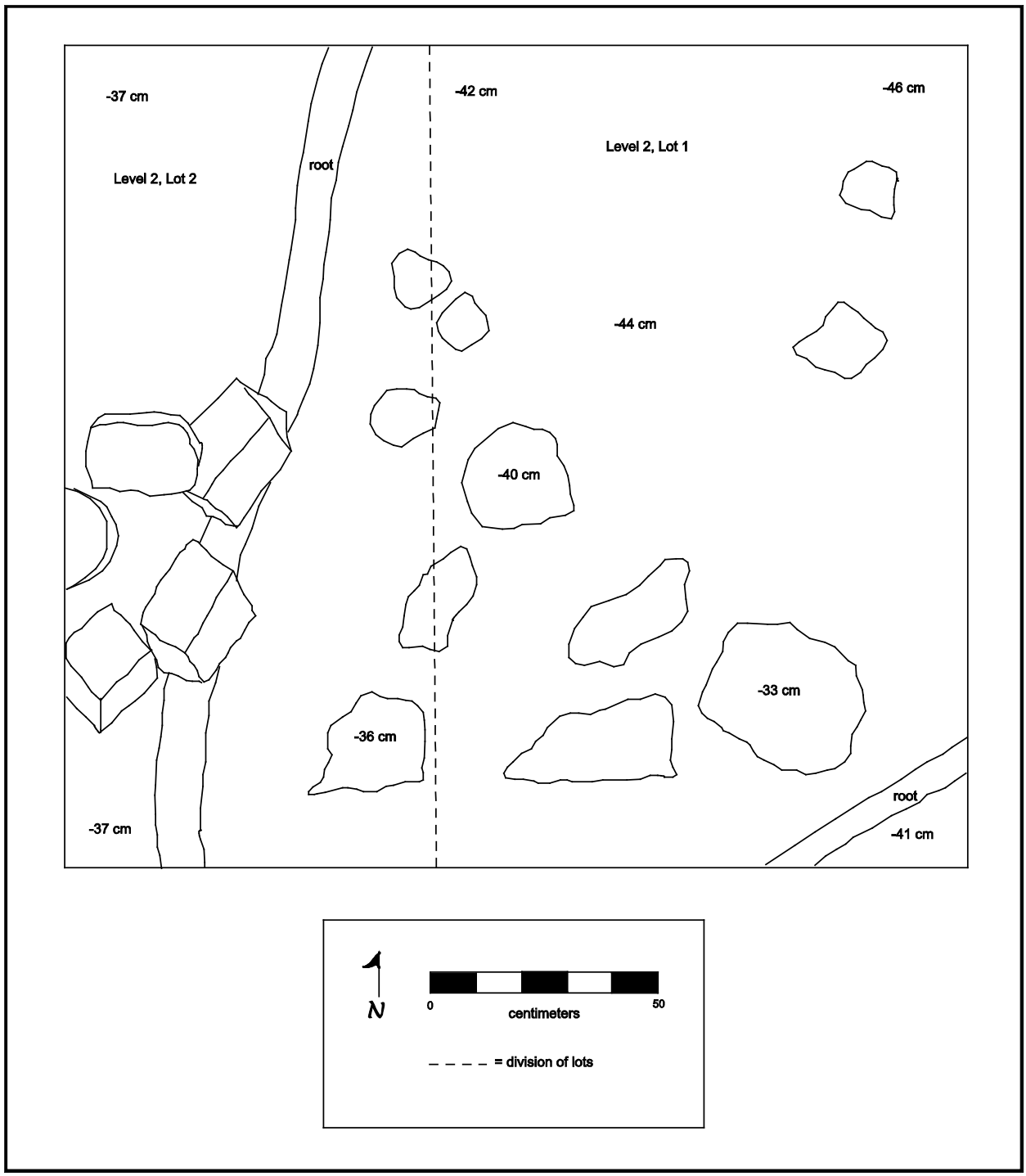


Figure 256. Xbaquil, Operation 1, Level 2, Lots 1 and 2, Plan Map

Figure 257. Xbaquil, Operation 1, Level 3, Lot 1

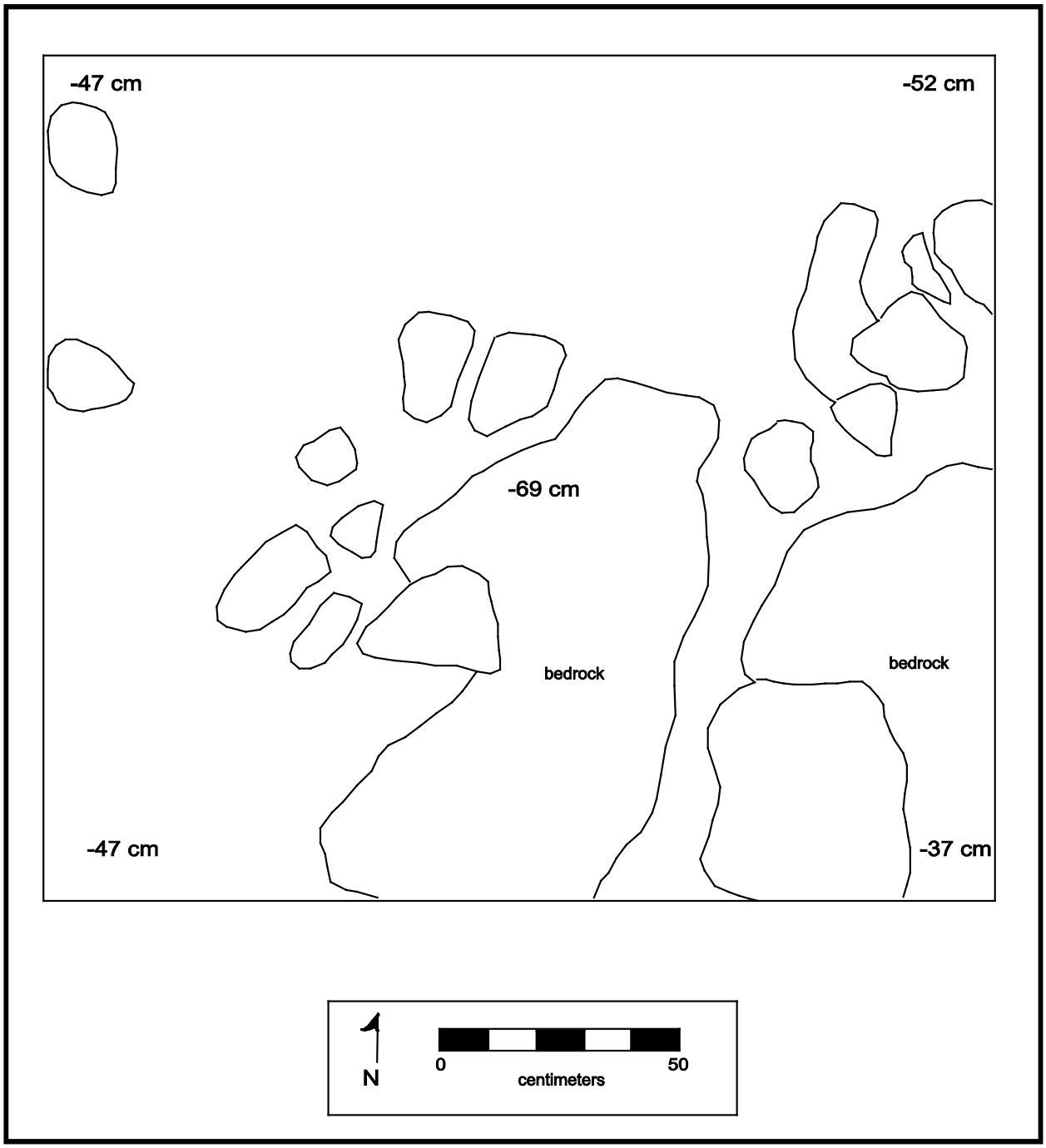


Figure 258. Xbaquil, Operation 1, Level 3, Lot 1, Plan Map

Figure 259. Xbaquil, Operation 1, Level 4, Lot 1

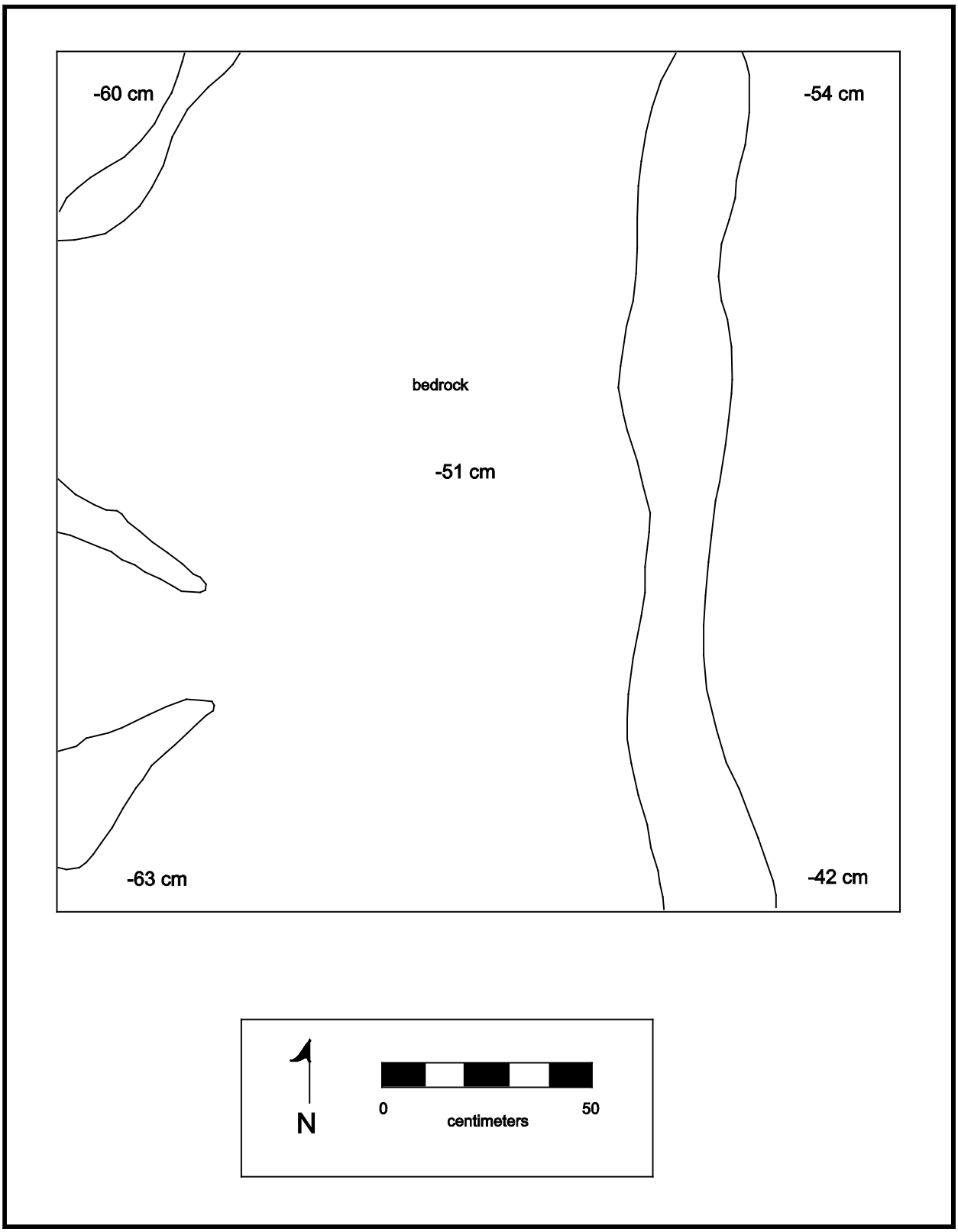


Figure 260. Xbaquil, Operation 1, Plan Map at Bedrock

Figure 261. Xbaquil, Operation 1 at Bedrock

Figure 262. Xbaquil, Operation 1, Backfilled

Interpretation

No archaeological material was recovered in direct association with the concentration of carved stones from Level 2, Lot 1. The fact that they were arranged in a circle may be significant, but the only conclusion we can make about this concentration of carved stones is that they are from the same construction phase during the Terminal Classic, as evidenced by the ceramics recovered from Operation 1 at Xbaquil. The carved stones may have been pushed out of their original position by the large root disturbance that grew under them. There is also a historic Spanish hacienda in the area of this settlement, so the carved stones may also have been taken out of their original context by the Spanish inhabitants who may have intended to reuse them for constructing the hacienda.

Although the excavation of Operation 1 recovered little data in terms of ceramics (48 sherds total), the ceramic data recovered from Xbaquil allows us to determine that this settlement had at least one construction phase during the Terminal Classic. This data, along with the data recovered from Operation 2 (see Chapter 34), provide us with a better understanding of the chronology and the activities of the Prehispanic people who occupied Xbaquil.

Part 3: The *Ejido* of Sacalaca

Chapter 34: Xbaquil, Operation 2

Jorge Pablo Huerta R.

Operation 2 was a test pit of 2x2 m, located northwest of Xbaquil's Structure N1E2-1 (Figure 252). This unit was designed with the aim of getting to know the possible phases of occupation and associate them with the ceramic samples that would be recovered. Thus, it was intended to get an overview of the dynamics of settlement, both within the site and the region.

The excavation consisted of four levels, none containing cultural features. The surface was covered with litter leaf that was cleaned to establish the limits of the operation (Figure 263). Following this, the excavation of Level 1, Lot 1 began, which was a dark brown sediment (10 YR 3/3). On average this deposit measured just 10 cm and only eight pieces of ceramics were recovered, of which only four were identified; these were from the Terminal Classic (Yokat Striated var. Yokat, Muna Slate, and Teabo Red) (Figure 264).

The next level (Level 2, Lot 1) began with the change in the color of the sediment, which became a little redder (10YR 3/2). In the eastern part of the unit part of the bedrock was discovered, indicating that the depth of the excavation would not be much (Figure 265). Ceramics located in this layer was few (25 sherds), and also belonged to the same types as the previous lot (see Chapter 40).

Level 3, Lot 1 consisted of a layer of reddish sediment (3.5 YR 3/2), which was mixed with several stones about 7 x 10 cm, with much of the bedrock dividing the unit in two areas with sediment at the eastern and western sides (Figure 266). The discovery of more gravel and a reddish soil pointed the end of this deposit. Ceramics located within this level were from the types Yokat Striated var. Yokat and Muna Slate from the Terminal Classic.

Level 4 corresponded to areas where bedrock was encountered, which was why was divided into two lots. The eastern side of the unit was Level 4, Lot 1; it had a dark reddish color (10YR 3/6). This lot had a depth of 25 cm and ended with the discovery of bedrock. Level 4, Lot 2 was the western portion of the unit, which had the same consistency and coloration as Lot 1. Equally here, the excavation ended with the discovery of bedrock, which marked the end of this unit (Figure 267). While ceramics located in Level 4, Lot 1 were Yokat Striated var. Yokat and Teabo Red (Terminal Classic), the sherds found in Level 4, Lot 2 were of the type Sierra Red, from the Late Formative period.

The final tasks conducted in this test pit were its registration through photographs and drawings, followed by the backfilling of the unit (Figure 268). This work concluded when the original level of surface was reached (Figure 269).

Interpretation

This excavation revealed that in this area of the site there is no feature of cultural origin, but that there were natural surfaces. Level 4, Lots 1 and 2 correspond to the first surface of the site. Although Late Formative sherds indicate that this could date from the

Figure 263. Xbaquil, Operation 2, Surface

Figure 264. Xbaquil, Operation 2, Level 1, Lot 1

Figure 265. Xbaquil, Operation 2, Level 2, Lot 1

Figure 266. Xbaquil, Operation 2, Level 3, Lot 1

Figure 267. Xbaquil, Operation 2, Level 4, Lots 1 and 2

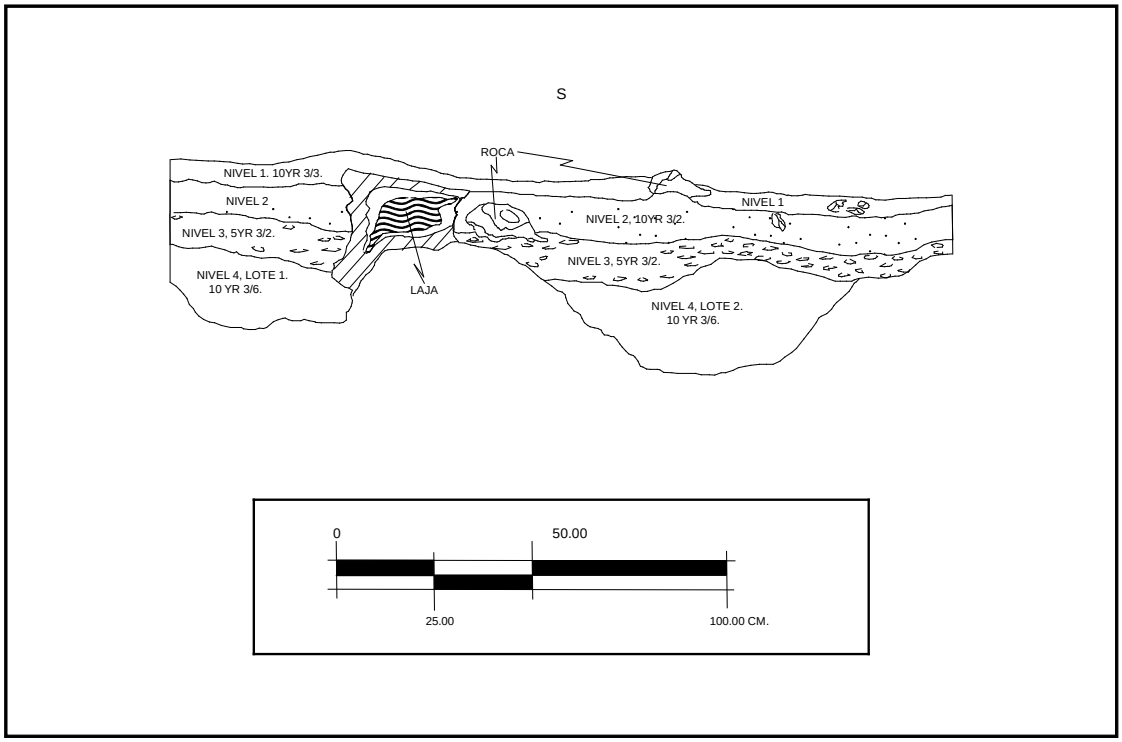


Figure 268. Xbaquil, Operation 2, South Profile

Figure 269. Xbaquil, Operation 2, Backfilled

Formative, some Terminal Classic sherds were included, although these may have entered through one of the many holes characteristic of the bedrock in this area.

In any case, Levels 1, 2 and 3 all contained Terminal Classic ceramics, suggesting that no prior or major subsequent activity was carried out in this part of the site. It is noteworthy that this excavation was not very deep, due to the proximity to bedrock. However, the results served to infer that the construction activity was minimal and that the site only seems to have had one significant occupation, during the Terminal Classic.

While much remains to be learned about the settlement, with the information gathered in Operations 1 and 2 of Xbaquil, we can come to know more of the characteristics of this small settlement, one of many found in the Cochuah region.

Part 4: The *Ejido* of San Felipe

Chapter 35: San Felipe, Structure N4E4-3, Operation 9

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During the 2014 season, extensive excavations were conducted at the site of San Felipe. These were carried out with the aim of getting a better understanding of the dynamics of settlement at the site, as well as to define a diagnostic type of architecture that has been located at various sites in the region, open fronted structures. This type of construction has been interpreted as an example of Post-florescent period elsewhere in the Northern Lowlands (*e.g.* Bey et al. 1997; Barrera et al. 2006; Prem 2003; Ringle et al. 2004; Tourtellot and Sabloff 1994).

In particular, the site of San Felipe has at least two examples of this type of construction, Structure N4E5-6 and Structure N4E4-3 (see Chapter 36) in the middle of the North Group (Figures 270 and 271). This position suggests that these structures had a critical importance during some phase of this site's occupation. For this reason, excavations of both open fronted structures were carried out in order to get a better understanding of their characteristics and chronology, as well as to know the role that they played within the settlement.

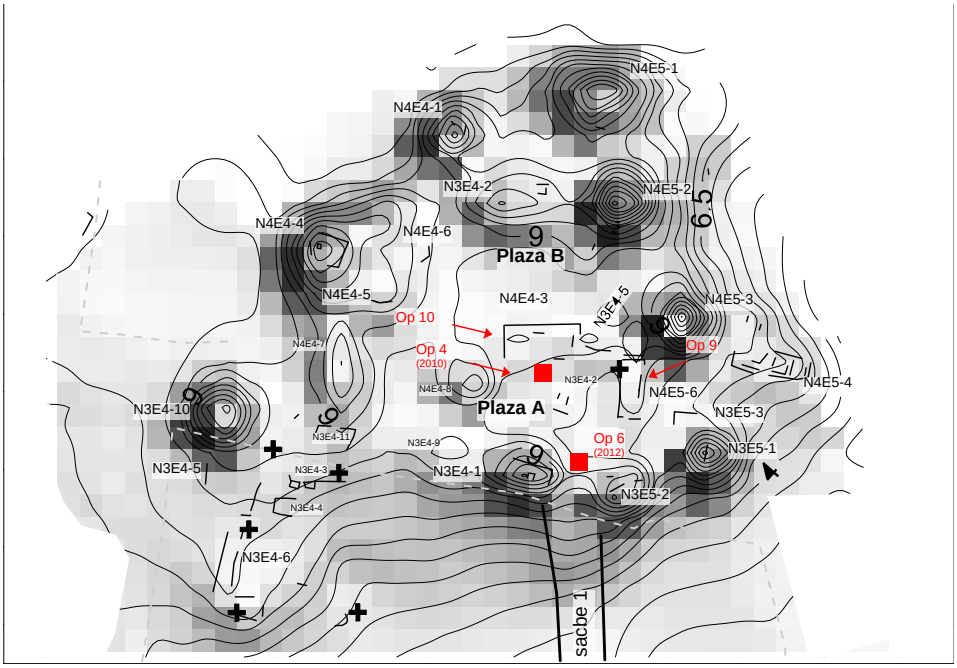
Structure N4E5-6 consisted of a C-shaped foundation brace, of which only one line of stones partially protruded to the surface (Figure 272). In front of this, another wall was aligned with the long side of the C-shaped structure, which was associated with a grinding stone (*metate*) that was almost complete, although broken. This building is located on the east side of Plaza A and is aligned in a north-south direction. On the back of this construction, a drop of the terrain (of about 2m) seemed to suggest that this building was built right on the edge of the wall of Plaza A.

Structure N4E5-6 was designated as Operation 9 and was divided into several suboperations in order to have better control during the excavation. The excavation of Structure N4E4-3 was designated as Operation 10, which is described in Chapter 36. Based upon the results previously obtained from Operations 4 and 6, conducted in 2010 and 2013 respectively (Flores and Shaw 2010; Huerta 2013), it was known that this square had an occupation that spans from the Late Formative through the Terminal Classic.

However, the excavation of Structure N4E5-6 had only the intention to reach the most recent surface of the Plaza A, which dates from the Terminal Classic (according to previous results). Although it was also known that there was a Postclassic occupation in the area, as evidenced by several shrines that are nearby (Shaw and Flores 2008), it was not expected that this would have been so intense, although there was a possibility that Structure N4E4-3 was a building representative of this period.

Excavation

The area where Operation 9 took place was covered by secondary vegetation, thus the first task was to clean the surroundings to identify the area to be excavated.



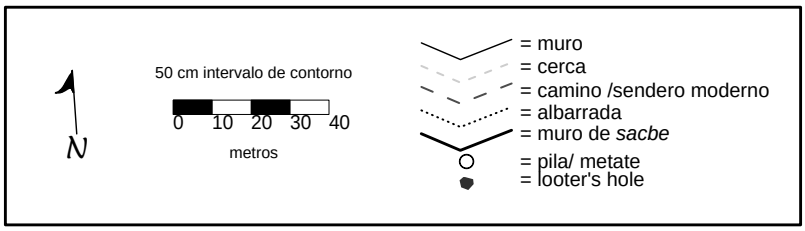


Figure 270. San Felipe, North Group, Location of Operations

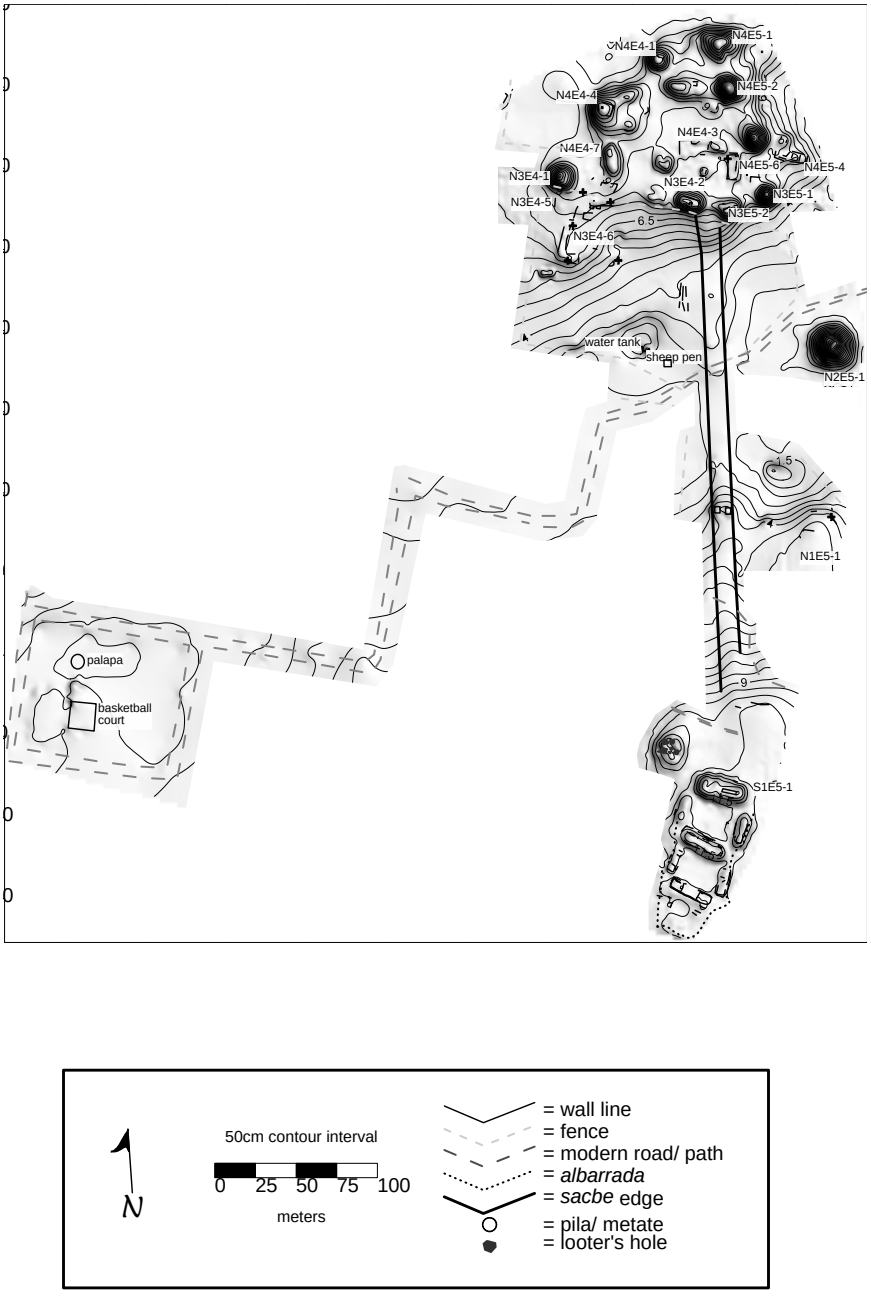


Figure 271. Plan Map of the Site of San Felipe (2014)

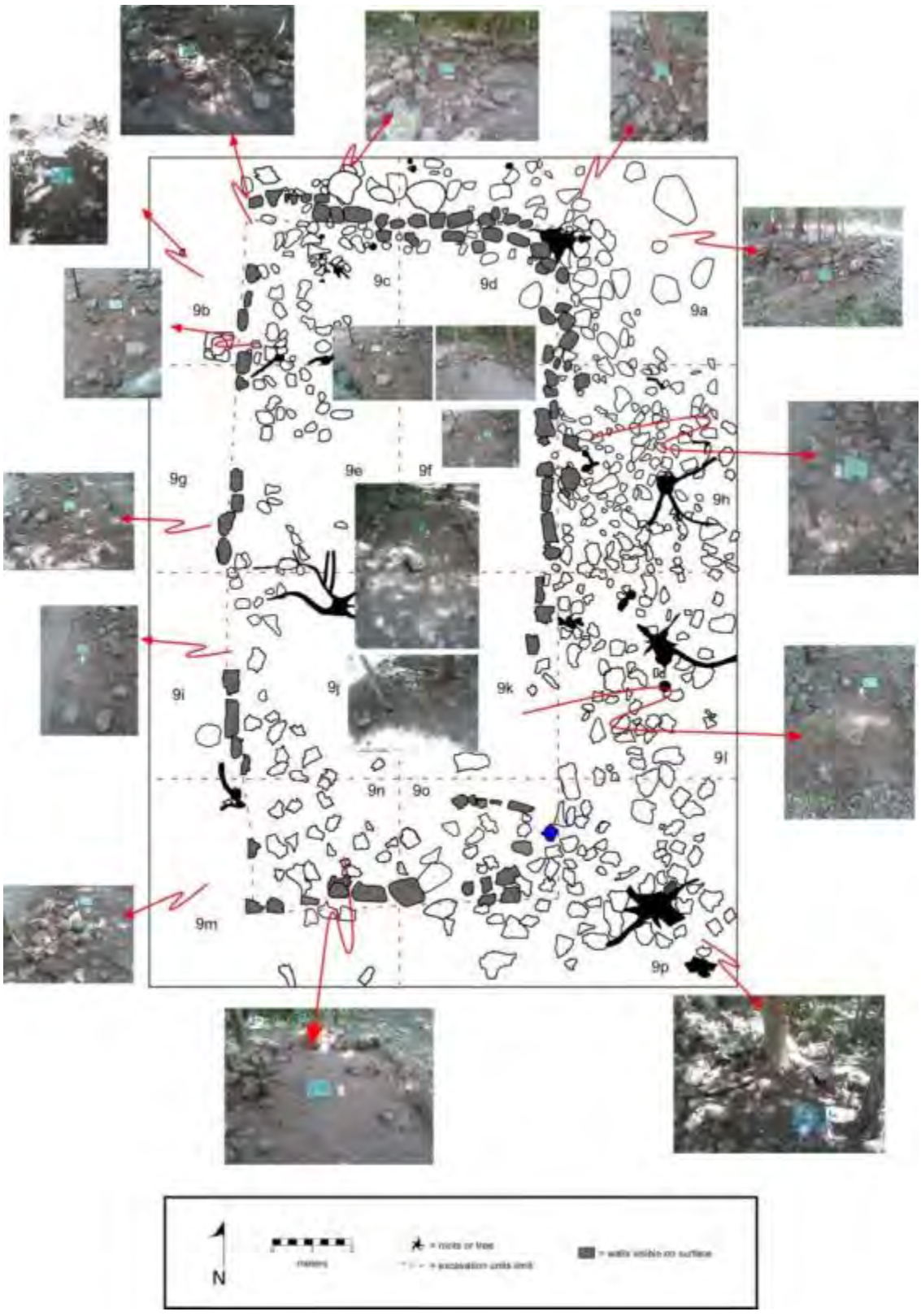


Figure 272. San Felipe, Structure N4E5-6 Prior to Excavation

On the surface, the visible elements of Structure N4E5-6 measured 13.6 x 6.2, including the front wall associated with the grinding stone (Figure 272). The stones forming this construction protruded only a few centimeters above the surface and these were used as a reference to set the grid that served to define the excavation and its subunits (Figure 273).

In total, Operation 9 was divided into 16 suboperations, which were located in relation to the distribution of the structure's elements. While some were located within the internal area, others corresponded to the exterior zone of this construction. This division allowed a better control of the excavation and the materials that would be recovered, as well as to conduct a further analysis (see Chapter 40).

A total of 8 excavation units were set up along the exterior area of the Structure N4E5-6, with the aim of uncovering the wall alignments and possible doorways of the construction. Equally, 8 subunits were established within the internal area, in order to determine the interior surface and possible areas of activity. The following section describes each of the excavated areas.

Exterior front area (Suboperations 9b, 9g, 9i and 9m)

The frontal area of the construction was composed of suboperations 9b, 9g, 9i, and 9m, and correspond to the contiguous area of 1.5 m from the front wall of Structure N4E5-6, a flat area where it was hoped to find the plaza surface upon which this construction was established. In addition, on the surface, a fragmented *pila* (*metate*) was visible (Figure 274); thus it was expected that indications of activity conducted in the exterior front area of Structure N4E5-6 would be located.

All units were excavated from the front wall to the exterior. First layer at this area, Level 1, Lot 1, was a dark grayish brown sandy loam sediment (10YR 4/2), with a slightly hard and friable consistency that became slightly sticky and plastic when it was wet. This level had medium and coarse roots as well as rootlets. Level 1, Lot 1 was lacking any sort of construction fill; only gravel was mixed with the soil, at 20-30 percent. In addition, the area next to a few other stones (of roughly 30 x40 cm in size) scattered in Suboperations 9g, 9i, and 9m was also excavated.

A notable discovery, located in the Suboperation 9g and in the northeastern part of the unit 9m, was a series of stones that are placed horizontally, forming a step to access to inside of Structure N4E5-6 (Figure 274). Close to the end of this level, a series of white spots were found, which are part of a degraded stucco layer that once covered the walls of Structure N4E5-6 and the surface of Plaza A. This layer extends through all of these units and was excavated until the sediment changed, at roughly 40 cm below the surface, when a whitish soil was found. This whitish sediment was not excavated because it was the occupation surface that was associated with Structure N4E5-6. It coincided with the base of the front wall of Structure N4E5-6, as well as with the base of the *pila* (*metate*) located in Suboperation 9g.

In Level 1, Lot 1, one chert thinning flake and a large quantity of ceramics were located. Although the majority of ceramic sherds were from the Terminal Classic period, several Chen Mul modeled fragments were also located (see Chapters 40 and 42). These

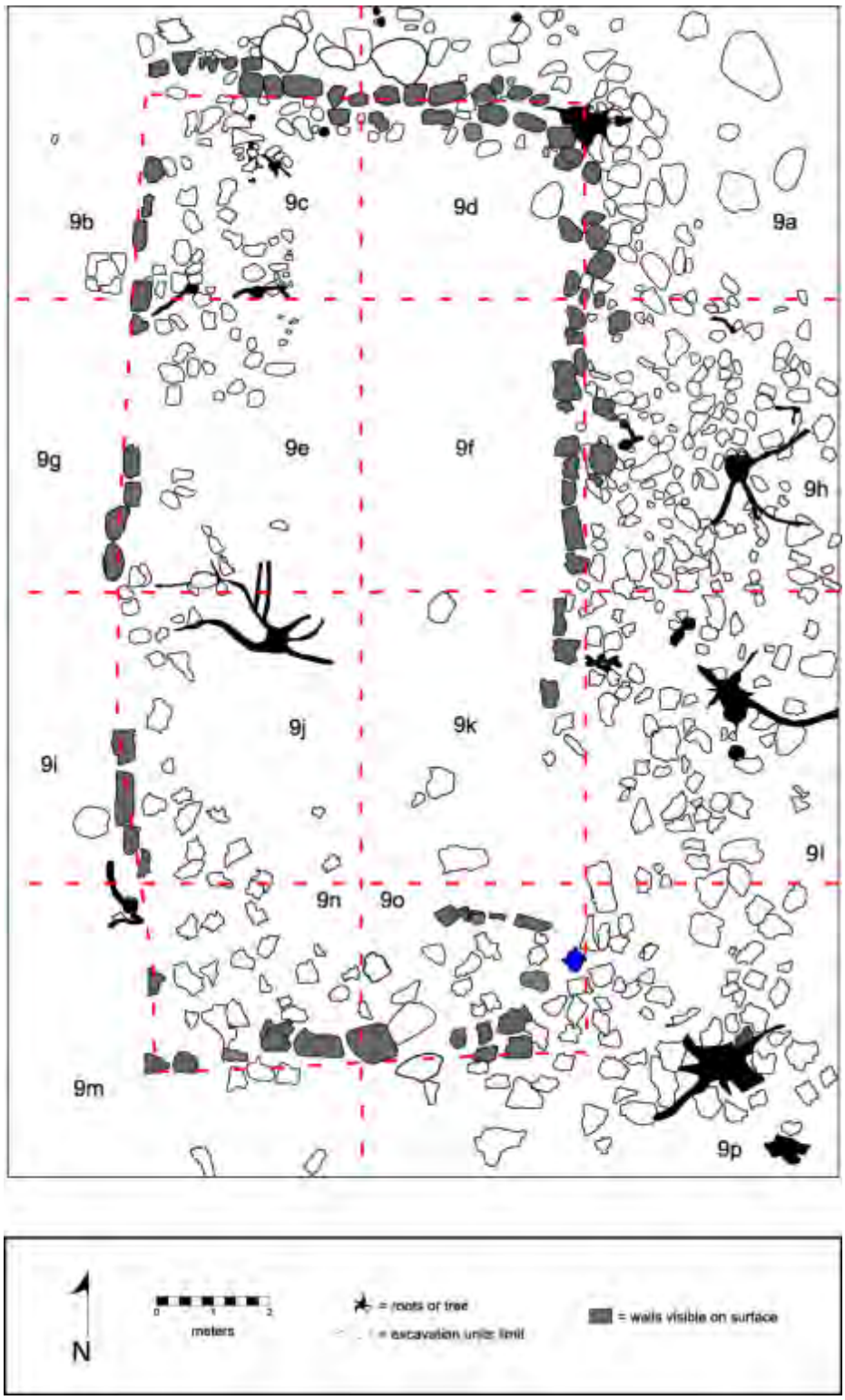


Figure 273. San Felipe, Structure N4E5-6, Operation 9, Suboperations Plan

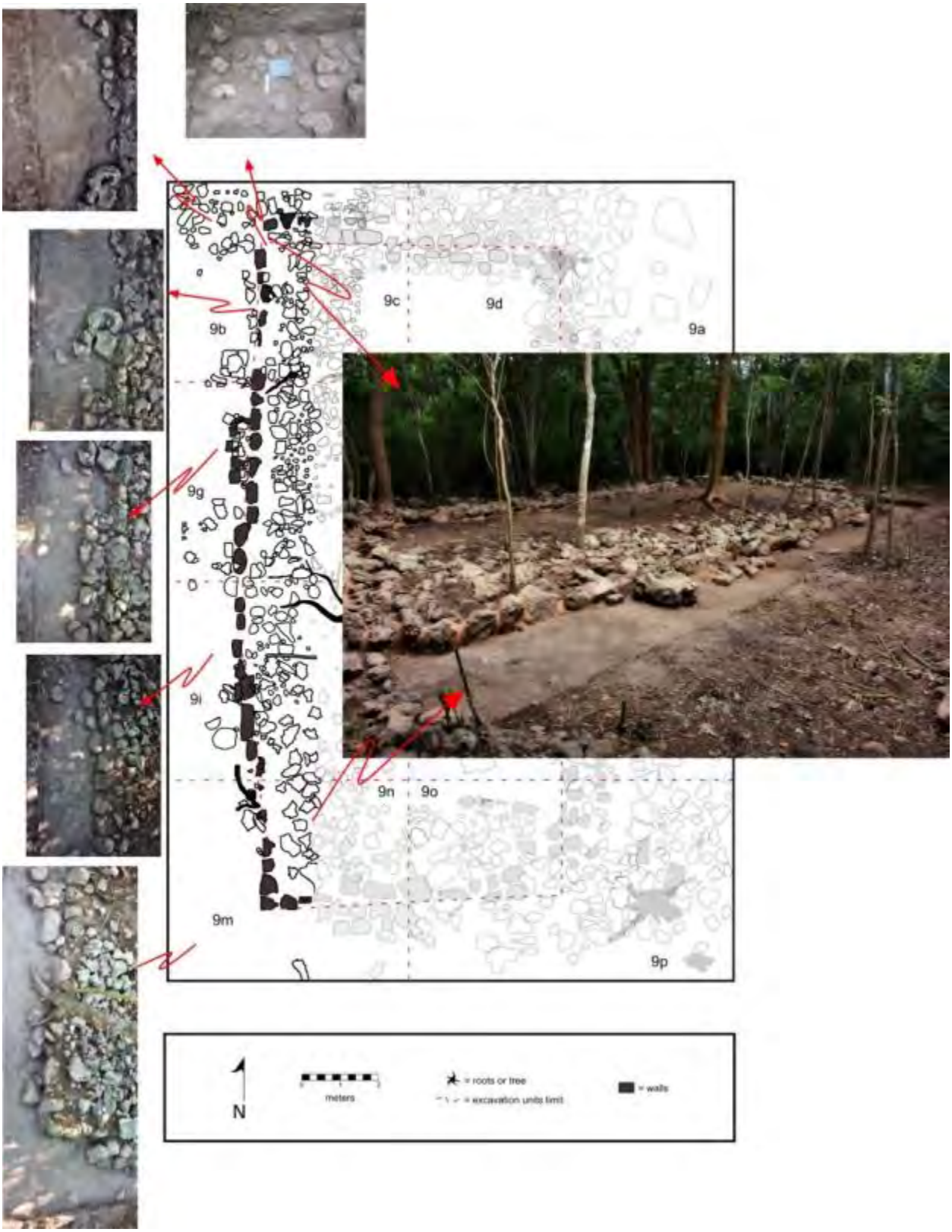


Figure 274. San Felipe, Structure N4E5-6, Operation 9, Front Wall

kinds of ceramics are indicative of a Postclassic occupation, although samples for this period are limited to censer fragments that may have been left in the area as a part of religious activities. Considering the total sample, the majority of the ceramic sherds are from the Terminal Classic and correspond to the types Yokat Striated var. Yokat and Muna Slate. Once the entirety of Level 1, Lot 1 in the front area was removed, it was possible to have a full view of the front wall of Structure N4E5-6, a task that marked the end of excavations in the area (Figure 275).

Exterior north area (Suboperations 9a and 9b)

The northern portion of Structure N4E5-6 consisted of the northern area of Suboperations 9a and 9b. As with all other units in the exterior of this structure, its goal was to find the plaza surface upon which this construction was established.

While the sediment of this area was similar to that located in the units at front of the construction, a dark grayish brown sandy loam soil (10YR), the discovery of a cobble fill led us to separate this area as another lot, Level 1, Lot 2. This fill was directly adjacent to the north wall of the construction, and it may have been associated with an artificial platform located to north and east of the unit (Figure 276). This bed of medium-to-large cobbles seemed to be continued beyond the excavation boundaries, to the east and north side; for this reason this feature was not fully explored. The two adjacent structures seemed to have been built on top of this possible platform. This platform fill was composed of mixed stones, ranging in size from pebbles to small cobbles. Medium-to-large cobbles as well as small boulders were left in place until they were mapped and photographed to get a better understanding of the shape and boundaries of the possible platforms.

Ceramics from northern exterior area were mainly Terminal Classic examples, but also several fragments of Postclassic Chen Mul censers were found, which indicate at least Postclassic visitors in the area. Once the rocks of the platform fill contiguous to the north wall were exposed, the rocks were left in this position through the end of the excavation, to be consolidated later. None of the stones in these feature were removed or altered and were consolidated in their original positions (Figure 276).

Exterior rear area (Suboperations 9a, 9h, 9l and 9p)

The rear part of Structure N4E5-6 corresponds to the area of Suboperations 9a, 9h, 9l and 9p. The excavation of this zone was more complicated because it was full of numerous rocks coming from the collapse of the upper areas and the back walls of Structure N4E5-6. These rocks were small and medium-sized boulders that were scattered to the east of the building.

All boulders, roots, and small cobbles were cleaned and removed with hand tools; being careful not to remove any of the large cobbles or the small and medium boulders. Soil in this eastern part of Operation 9 was a dark grayish brown sandy loam sediment (10 YR 4/2). There were no mottles in the soil but there were small peds forming weak granular pebbles. Soil consistency when dry was loose; soil when moist was friable and slightly sticky and slightly plastic when wet.

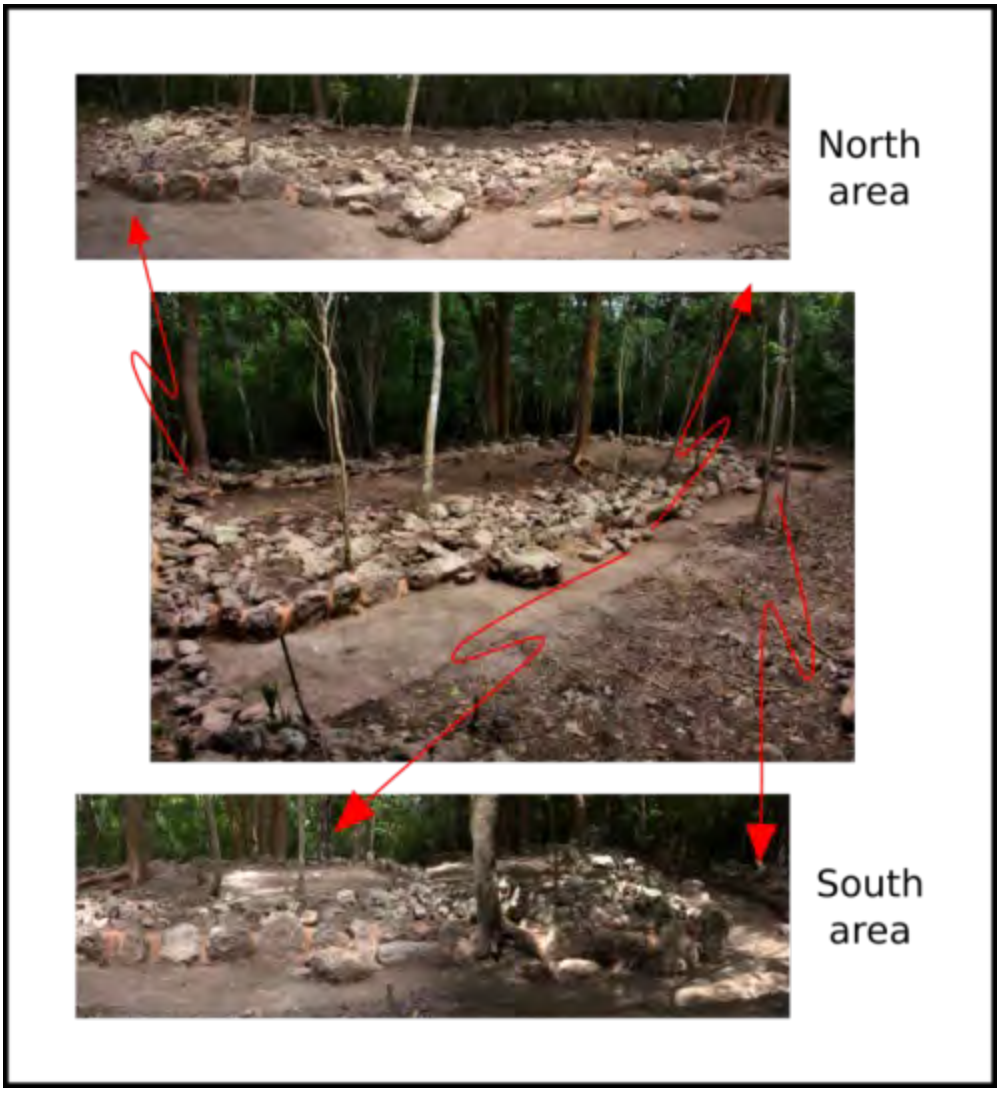


Figure 275. San Felipe, Structure N4E5-6, Operation 9, Excavated Front Wall

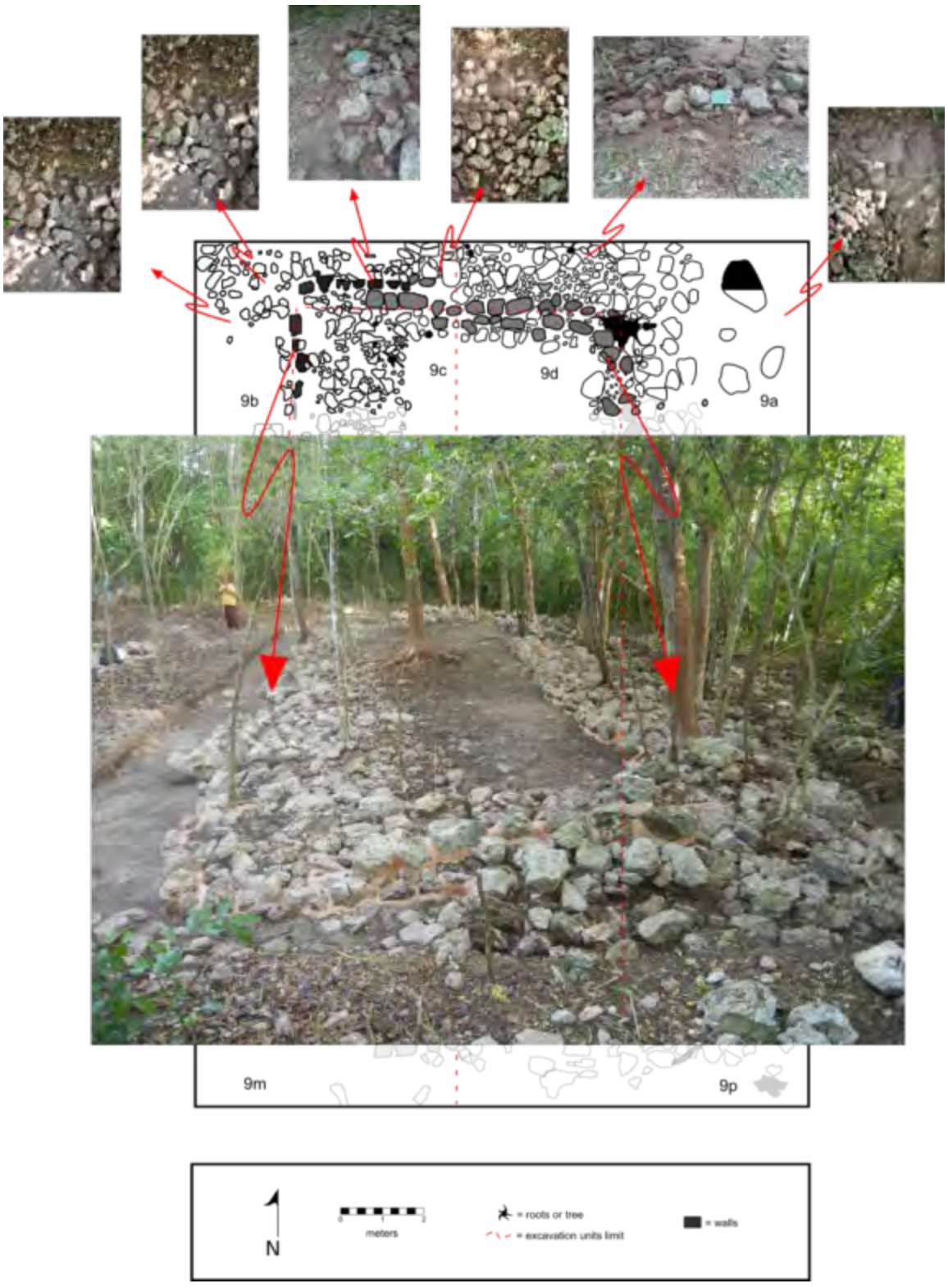


Figure 276. San Felipe, Structure N4E5-6, Operation 9, North Area Excavated

There were many coarse to fine roots in all the areas. It is this zone several dead dogs' remains had been placed for disposal by the modern inhabitants of the village of San Felipe. Most of the dogs seemed to be placed on ground surface, in and adjacent to the area of the collapse.

In the western area of all these units, several rock alignments parallel with Structure N4E5-6 were found. These walls seem to be part of a substructure that was used as the base of the C-shaped structure being examined in Operation 9. For that reason, because our permit was only to excavate the foundation brace (Structure N4E5-6) itself, the excavation of these exposed walls not continued and they were only cleaned and consolidated after the end of the excavation (Figure 277).

Although these rock alignments were not fully exposed, it is thought that were part of the border walls of the Plaza A, because they coincide with the end of this artificial elevation. If this is correct, Structure N4E5-6 was constructed at the eastern limit of this raised plaza (Figure 270).

Once all the collapsed rocks and all the sediment was extracted from the entire area, these units were recorded through photographs and plans (Figure 277). Cultural materials recovered from these excavations included Terminal Classic sherds, as well as several Postclassic Chen Mul Modeled fragments (see Chapters 40 and 42).

Exterior south area (Suboperations 9m and 9p)

This area was comprised of the southern zone of Suboperations 9m and 9p. As with the others subunits at this operation, these were excavated with the aim of locating the limits of Structure N4E5-6. The discovery of the walls of this section was easier than the previous sections because the excavators followed the front wall; furthermore, the well-preserved rock at the southwest corner was visible from the surface.

This area in both suboperations was excavated as Level 1, Lot 2. Soil in this lot consisted of a dark grayish brown sediment (10YR 4/2), with a sandy loam consistency. There were no observable mottles in the soil. The soil was loose when dry, friable when moist, and slightly sticky and plastic when it was wet. Gravel content was low and included a 15-to-20 percent of somewhat rounded and angular pebbles and granules.

Many fine to medium roots were located at this area, mixed with larger rounded cobbles and small boulders. These rocks were associated with the collapse of the structure and were scattered at the base of the southern wall. In the area of Suboperation 9m, close to the corner, various stones were placed horizontally, forming a set of two steps, similar to those located at the front wall (Figure 278). These steps were constructed to give access to the superstructure of Structure N4E5-6.

Soil in the southern area of Suboperation 9 was removed as Level 1, Lot 1. This concluded when a whitish sediment was discovered, which was the level of the plaza surface. Once this level was exposed through all the units, excavation in this area ended. Cultural material observed in this part of Operation 9 was mostly from the

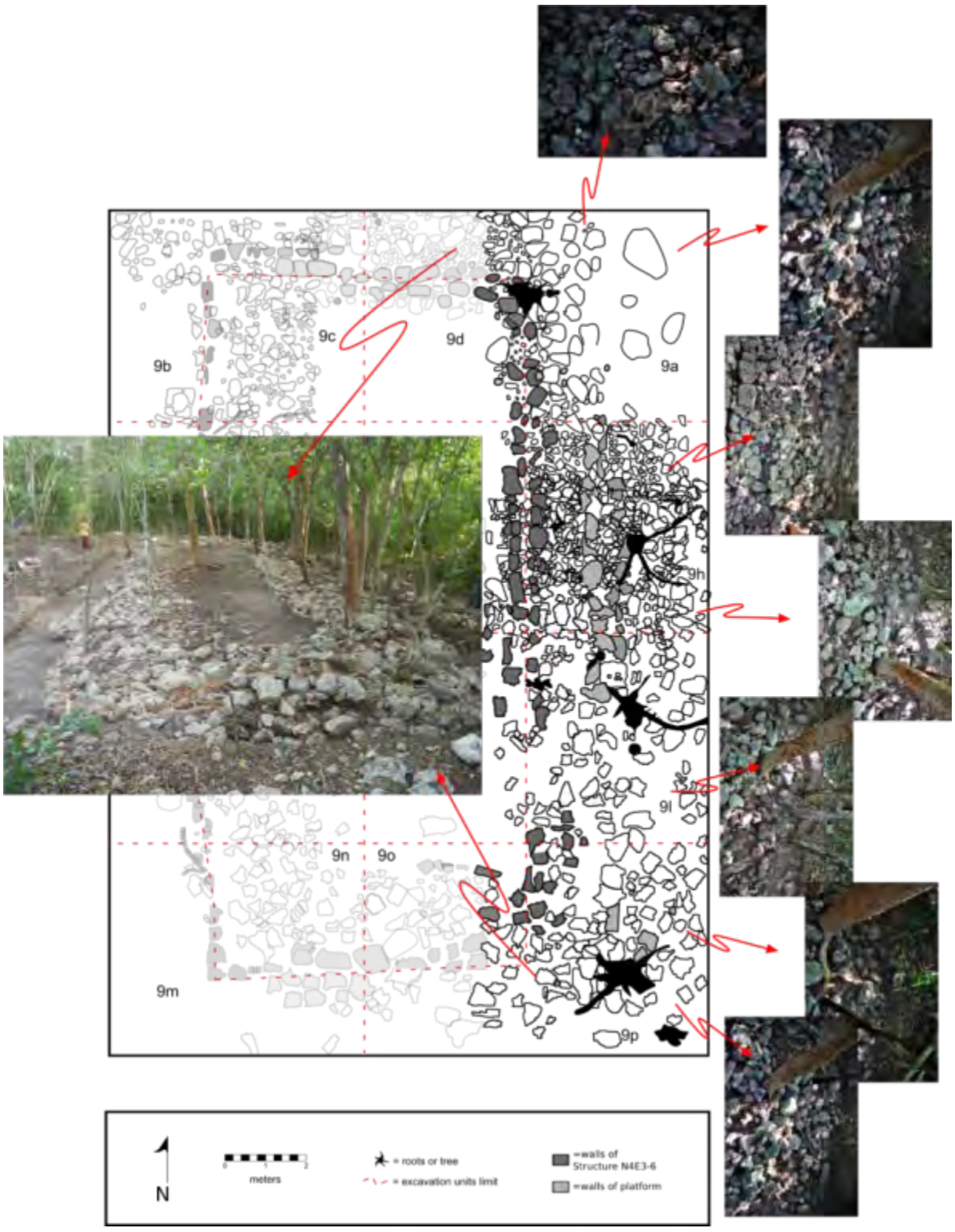


Figure 277. San Felipe, Structure N4E5-6, Operation 9, Rear Area

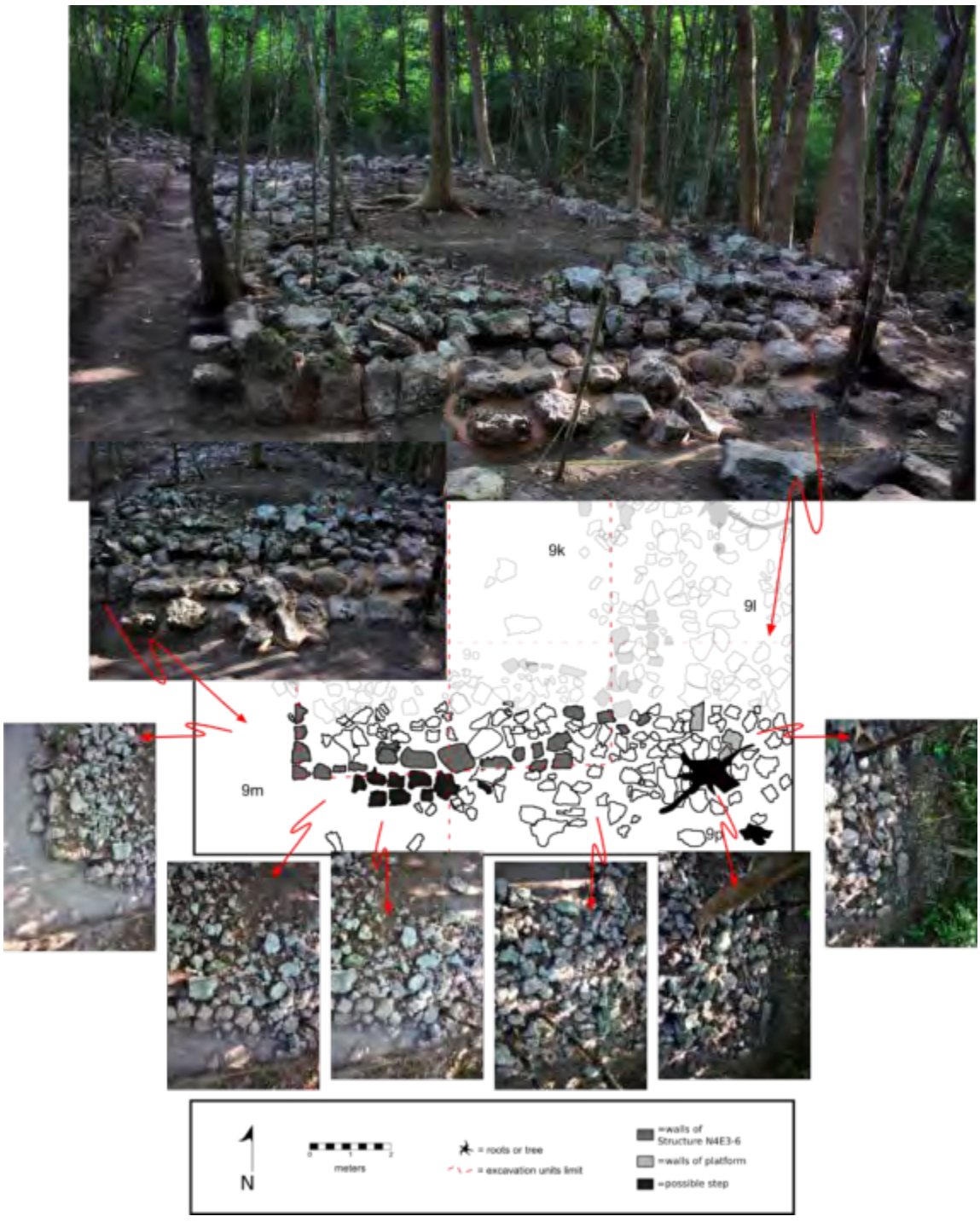


Figure 278. San Felipe, Structure N4E5-6, Operation 9, South Area

Terminal Classic, although several Postclassic sherds, mainly Chen Mul Modeled examples, were also found.

In the southern area of Suboperation 9m a small 1 x 1 m mound of *sascab* was encountered. This feature was named as Suboperation 9m, Level 1, Lot 3. A small bag of ceramic sherds was recovered from this lot, which include examples from the Terminal Classic and Postclassic ceramic sherds (see Chapters 40 and 42). Among these, a ceramic maize fragment with one intact leaf was found *in situ* in the northeastern portion of the 1 x 1 m mound, although it was definitely not in a primary context.

This feature was probably a refuse pile from modern humans that was created when locals from San Felipe came to the area to look for limestone rocks or to bury their dogs. Soils within this feature consisted only of *sascab*. No rocks from collapse or charcoal were located within the *sascab*. The excavation of Suboperation 9m, Level 1, Lot 3 was terminated once the mound of *sascab* was level with the ground surface. Once all of the soil from the external suboperations of Structure N4E5-6 was removed, excavation in the external area of Operation 9 concluded.

Interior area (Suboperaciones 9c, 9d, 9e, 9f, 9j, 9k, 9n and 9o)

The inner area of Structure N4E5-6 was divided into eight suboperations (9c, 9d, 9e, 9f, 9j, 9k, 9n and 9o). Only one level in of all these units was excavated (Level 1, Lot 1), which was a dark grayish brown sediment (10YR 4/2), very similar to the one found in the exterior area of the Operation 9. In the inner area of all units, only a few centimeters were excavated, because there was not much sediment that covered this zone.

The end of Level 1, Lot 1 was when a change in the color of the sediment was detected (it became more whitish). In addition, this soil change coincided with the base of the double wall that forms Structure N4E5-6. For that reason, it was hypothesized that this was the floor level of this construction. It is noteworthy that the majority of sediment was removed from the eastern suboperations (9d, 9f, 9k and 9o), while in units 9c, 9e, 9j, and 9n, not much of the soil was excavated because the construction fill was already exposed on the surface; thus only the rocks within the fill were cleaned (as in Suboperations 9c and 9j).

Within subunits 9c and 9j, there was two missing sections of the front wall. These areas started in the front wall until 50 cm into the fill of the construction. It was thought that these features were as a sort of entrance, but this was not confirmed. Another possibility is that these were the areas where the posts that once supported the perishable roof of this construction were placed. In either case, these areas were excavated as Level 1, Lot 6, and the ceramic material was comprised of samples from the Terminal Classic and also Postclassic Chen Mul Modeled sherds.

Equally, in the eastern suboperations, Suboperations 9d, 9f, 9k, and 9o, only a few centimeters were removed. This area was excavated until a whitish sediment was discovered, which was the interior floor of Structure N4E5-6. These units were originally delimited by the double wall, but during the excavation another contiguous alignment parallel to the back wall was identified (Figure 279).

This alignment has an apsidal shape at its northern end (Feature 1), and stratigraphically postdated the C-shaped double wall. In addition, this wall was made by

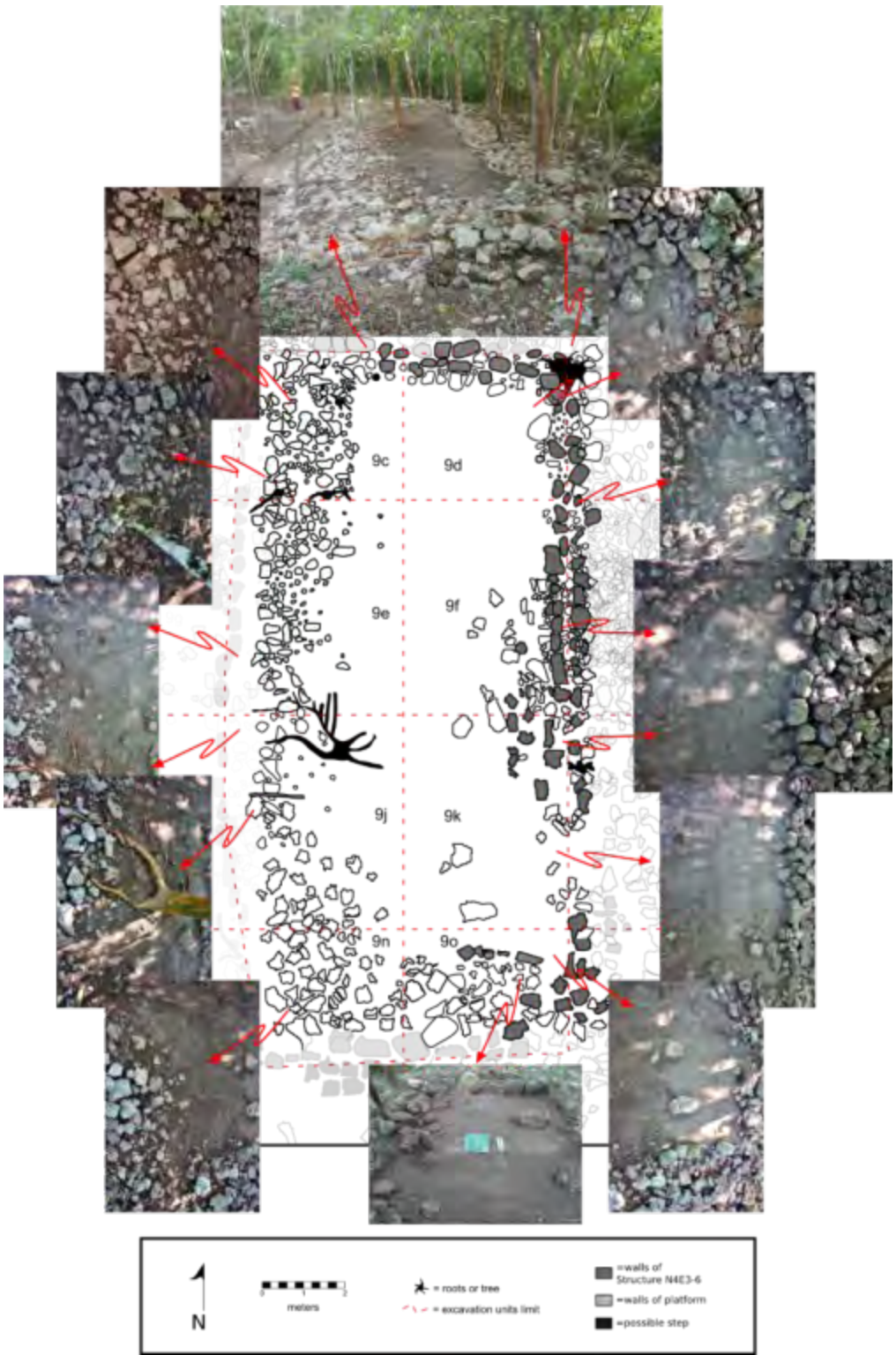


Figure 279. San Felipe, Structure N4E5-6, Operation 9, Interior Area

reusing other stones from Structure N4E5-6, possibly from Lot 6 in Suboperations 9c and 9j. No large rocks were removed from this area, only the sediment that was in between the wall lines. Ceramics from this area included samples from the Terminal Classic as well as from the Postclassic.

An interest feature was found at Suboperation 9k, where a square-shaped feature (Feature 2) was located along what would have been the back double wall of Structure N4E5-6. It was excavated as Suboperation 9k, Level 1, Lot 3. This square feature was a sort of shrine, which was attached to the front of the double wall. It was constructed with reused stones from other parts of the building. This possible shrine is the latest construction within this operation, because it was added to the back wall of Structure N4E5-6 and the other wall alignments. Although Terminal Classic ceramics were found in this suboperation, several Postclassic Chen Mul Modeled examples were located (see Chapters 40 and 42).

In addition, two obsidian blade fragments were also recovered from Feature 2. Once again, the presence of Chen Mul fragments and obsidian blade fragments helps to bolster the idea that Feature 2, located within Suboperation 9k, was a shrine. Once the entire interior area was excavated, registration tasks were performed and the walls were consolidated.

Double wall of Structure N4E5-6 (Suboperations 9c, 9d, 9f, 9k, 9o and 9n)

This wall has a C-shape and was partially visible on the surface. It was the feature that motivated the excavation of Operation 9. This wall is constructed with rocks re-used from other buildings, as is evidenced in some rocks that came from door jambs or from vaults. It is composed of two parallel wall lines, separated by 20 to 40 cm on average, depending upon the rock size (Figure 280). These kinds of recycled rocks were are the ones that were used to construct a double wall, which was the foundation of a perishable structure that once was roofed. The wall measured 13.20 long on its north-south axis, while at its northern and southern side about 3 m.

According to some of the larger stones, it can be assumed that the height of this wall was about 50 cm above the surface. During the excavation of this element only the sediment was removed from the rocks, no stone was moved and all were left *in situ* for further consolidation. The sediment content between these rocks was very similar to that seen in other sections of this construction, being dark grayish brown (10YR 4/2) in color with a silty-clayey consistency.

Although numerous pieces of gravel were found within the interior of the double wall, there was not a constant and uniform fill to indicate a specific construction technique. Instead, it was a mixture of stones and earth fill within the area delimited by this double wall.

As was already mentioned, in the western and northern part of the interior face of the structure, another wall (Feature 1) running parallel to the double wall was located. This feature seems to be the foundation of a building that was built later than Structure N4E5-6. The southern part of this double wall was less well preserved, because it appears that several of its stones were taken to build the Feature 2, which seems to have been a sort of shrine which was located in the Suboperation 9k.

Sherds from the Terminal Classic were found in this area, as well as several fragments of Chen Mul Modeled censers were located. The Postclassic fragments were

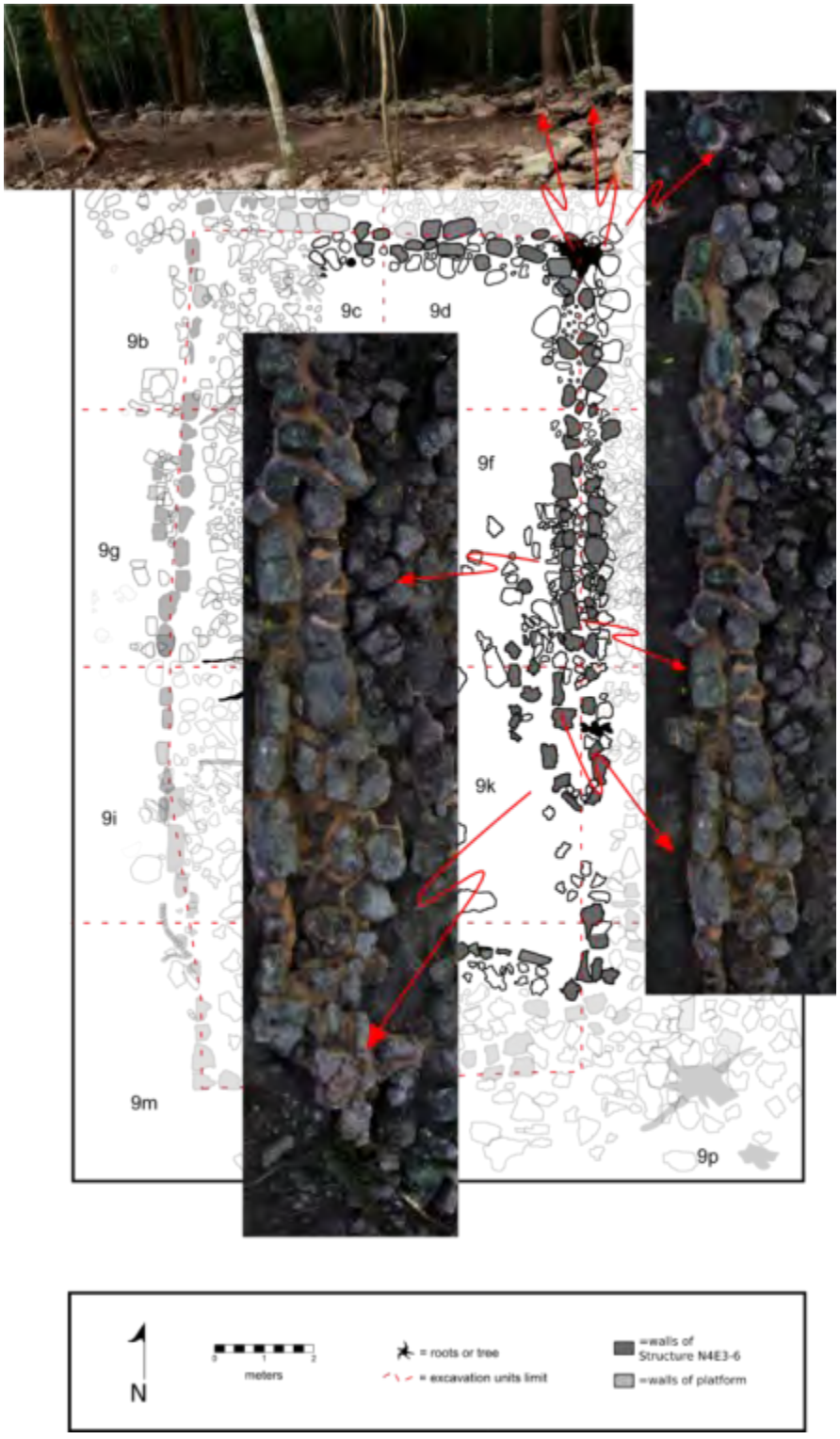


Figure 280. San Felipe, Structure N4E5-6, Operation 9, Double Wall Line

collected mainly within Suboperations 9f and 9k, which are associated with the possible Postclassic shrine (Feature 2).

Once all suboperations in Operation 9 were excavated in their entirety, the task of recording began. This included photographs and maps (Figure 281). Following this, consolidation work took place in areas where architectural elements were exposed, as is described in the next section.

Consolidation

The tasks of consolidation began once the excavation and recording of Operation 9 was complete. Since this construction lay on an earlier platform (Structure N4E5-6-sub), excavation was not continued to the ground level and only the exposed walls were consolidated. These consolidated architectural features were the double wall forming Structure N4E5-6 and rear walls located in the areas of Suboperations 9c, 9d and 9f, which are thought to belong to the Postclassic or at least a period later than the platform itself (Figure 282).

In addition, the front wall of Structure N4E5-6 located within Suboperations 9b, 9g, 9i ,and 9m along with the grinding stone and the steps located in units 9c and 9m (Figure 282) were consolidated. On the back of the structure, which corresponds to the area of Suboperations 9a 9h, 9l and 9p, several stones belonging to the collapse of the platform upon which sits Structure N4E5-6 and the double back wall of the structure were also consolidated. The aim of consolidating rocks from the collapse was that the stones in this platform (Structure N4E5-6-sub) would remain in their original positions and could be consolidated at some future date (Figure 282).

In the upper area of Structure N4E5-6, consolidation tasks took place in the front of the C-shaped double wall and at the two architectural features uncovered during excavation work, Features 1 and 2. The former is an apsidal alignment that runs parallel to the double wall, while Feature 2 is a series of stones forming a small square construction that seems to have been a sort of mini-shrine.

The consolidation process in all areas described above involved the removal of sediment that was among the stones, which was replaced by a mixture of lime and *sascab* in order to ensure the stability and preservation of all walls exposed during the excavation of this building (Figure 283).

Subsequently, once this mixture was dried, it was painted with a combination of lime and *chac luum* (red soil), which was to highlight the consolidated areas. No stone was moved from the location in which it was found; all the elements were consolidated *in situ*. Once all the above areas were consolidated, the mapping and photographic record of Structure N4E5-6 were completed (Figure 282).

When all tasks of registration were completed, the backfilling of the unit took place. This process is aimed at ensuring the preservation and stability of the construction once the work at this area ended. Where walls had been consolidated, a layer of fine soil was first laid down in order to not affect their stability. The rest of the sediment and stones were relocated in all units evenly until Structure N4E5-6 was covered in its entirety, whereupon the work at Operation 9 concluded (Figure 284).

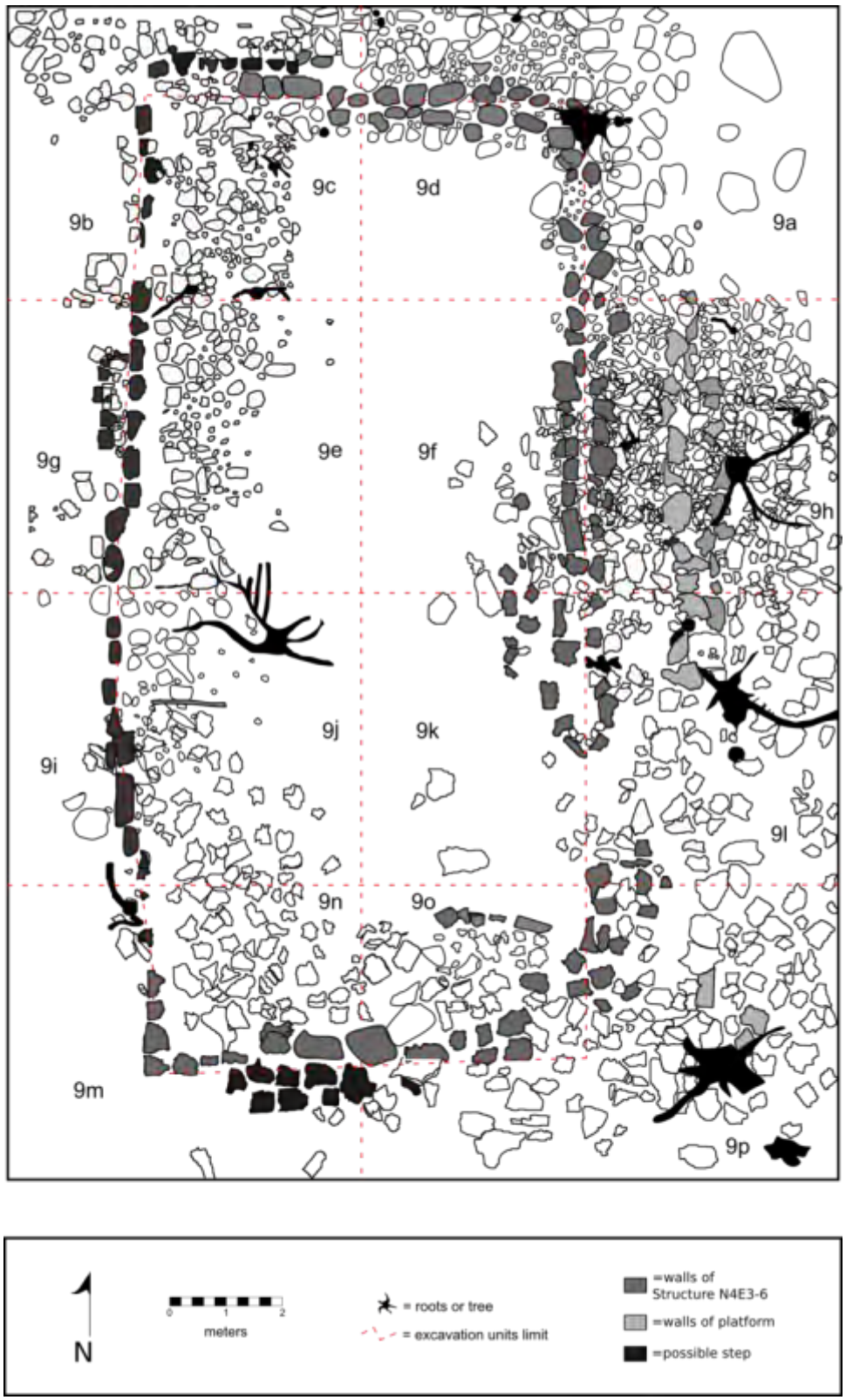


Figure 281. San Felipe, Structure N4E5-6, Operation 9, Plan after Excavation

Figure 282. San Felipe, Structure N4E5-6, Operation 9, Consolidation

Figure 283. San Felipe, Structure N4E5-6, Operation 9, Consolidation Process

Interpretation

The excavation of Structure N4E5-6 revealed interesting aspects that were not expected based upon the information that had been obtained on the surface, both for the area and for this construction. The first of these is that this C-shaped foundation brace were built on a previous platform, which was named as Structure N4E5-6-sub. This is a rectangular platform of 16.8 x 7 m, perched right on the edge of the Plaza A (Figures 270 and 282). In this sense, the C-shaped foundation brace (Structure N4E5-6), the target of the excavation of Operation 9, was actually a superstructure seated on said platform, a similar pattern to the findings of the Operation 10.

Apparently this building formed the eastern margin of the Plaza A, on which the double wall of the rear was built. From the east wall of the Plaza A, the northern and southern walls of the base of the platform, upon which Structure N4E5-6 was built, terminate in the front wall that forms the base of the platform (Figure 282).

Although there is evidence of earlier phases, ceramic analysis results indicate that this structure is from the late Terminal Classic and corresponds to a phase in which the other buildings on the site were potentially abandoned, had become obsolete, or had lost their previous importance. This is inferred because the structures excavated in Operations 10 and 9 were built with rocks reused from other Terminal Classic constructions, suggesting that several of those constructions were already abandoned or had lost their importance, thus these were partially destroyed to be recycled into new buildings.

Based on the result of the excavations, it is likely to Structure N4E5-6, as well as Structure N4E4-3 (see Chapter 36), could have been built with the material from the dismantling of Structure N4E4-9, an elongated structure that once formed the north side of Plaza A, which was partially destroyed (Figure 270). This is consistent with the hypothesis that these structures belong to a Post-monumental phase that must be occurred during the late Terminal Classic and/ or early Postclassic.

Following this, apparently when the Structure N4E5-6 was already obsolete and its roof had fallen, an apsidal structure was attached to the double wall, in the eastern and northern sections of the C-shaped structure. It is likely that the walls of the C-shaped construction were still partially standing and the builders of the apsidal structure (Feature 1) chose this northeast corner seeking protection within what at that time would be the ruins of the Structure N4E5-6. It is noteworthy that in the construction of Feature 1, some stones from the southern section of the double wall of Structure N4E5-6 were reused.

It is not possible to say whether builders of Feature 1 had some relationship with the builders of the C-shaped structure, although it is likely that they were a different group, because Structure N4E5-6 was no longer in use. Furthermore it was partially collapsed by that time, perhaps having been abandoned after a period of several years.

Figure 284. San Felipe, Structure N4E5-6, Operation 9, Backfilling Process

Probably during that time, after Structure N4E5-6 was abandoned, was when a sort of mini-shrine, located in Suboperation 9k, was constructed. This mini-shrine (Feature 2) was placed adjacent to the front face of the double wall, the longest wall of the C-shaped structure. Although we don't have an exact date, it is possible to assume that all these events must have occurred sometime in the Postclassic, as is suggested by a number of fragments Chen Mul censers that were found in these areas.

While no context that might indicate what was the function of this building was located, the absence of a bench like the one found in Operation 10 suggests that this structure had a different function and possibly has a complementary use to Structure N4E4- 3 (see Chapter 36). Although both buildings share a C-shape and are also formed by double walls, the absence of a bench feature indicates a distinct function.

Based upon the public character of the area where Structure N4E4-3 and Structure N4E5-6 (Operation 10) are located, it is likely that the function of these buildings had been public also. Although it is still difficult to characterize the type of population that inhabited this area during the Postmonumental period, as well as to know if the site of San Felipe had already been abandoned by the descendants of its original builders, it may suggest that the builders of both C-shaped structures was a small group, perhaps a few families who settled in the ruins of the classic San Felipe occupation.

An alternative idea is that these constructions (Operation 9 and Operation 10) may indicate the presence of new conceptions within which it was necessary to destroy a range structure and build a set of two C-shaped structures, with open fronts and walls and roof constructed with perishable materials. In any case, all this happened sometime during the late Terminal Classic or early Postclassic, when the classic site of San Felipe was partially or totally abandoned and many of the buildings had fallen into disuse.

Following this, both C-shaped buildings were again abandoned and perishable materials that composed degraded, leaving only the walls that formed their foundations. After this, on the ruins of the double wall of Structure N4E5-6, an apsidal construction was placed, which reused some rocks from the southern section of the C-shaped foundation brace. This phase occurred during the Postclassic and perhaps these were the people who left the Chen Mul Modeled ceramics, whose remains were found in several units of this operation (see Chapter 42). Later, in the twentieth century when the villagers of San Felipe built their homes in some nearby areas, several of the stones from this part of the site were reused in order to build and/ or modify the properties for this contemporary population.

Although there is still much more information needed to understand the function of these C-shaped constructions, the excavation of Structure N4E5-6 enabled us to know that this type of construction is much more complex than previously thought, since several phases overlap and several elements from previous buildings were reused. This sequence of stages would be first a range structure, Structure N3E4-5, reused to build the foundations and walls of the C-shaped structures, which was followed by an apsidal structure that was attached to the interior of Structure N4E5-6, when it was already in ruins.

There is still much to investigate about the characteristics of these buildings, which can give us information about some aspects of the people who built and inhabited them. However, future research in the area as well as in the northern and eastern sections of this building could help clarify what their role was and why were built on the main plaza of the monumental area of San Felipe, although the results of this excavation served to demonstrate the complexity of the occupational history of this settlement.

Part 4: The *Ejido* of San Felipe

Chapter 36: San Felipe, Structure N4E4-3, Operation 10

Alberto G. Flores Colin, Justine M. Shaw and Karleen Ronsairo

This season, the Cochuah Regional Archaeological Survey Project (CRAS), in addition to its usual tasks of mapping and the excavation of test pits, concentrated upon an extensive excavation of some architectural elements that were thought to be diagnostic of a specified period in order to better discern the chronology of the sites and the occupational history of the region. Among these diagnostic architectural elements are the open-fronted structures, which have been interpreted as a construction characteristic of the Postclassic period at several sites in the Northern Lowlands (*e.g.* Bey et al. 1997; Barrera et al. 2006; Prem 2003; Ringle et al. 2004; Tourtellot and Sabloff 1994).

Besides San Felipe, in our study area this type of open-fronted building has been localized in 12 settlements, including Nohcacab, Xtojil, Ramonal Oriente, Sisal, and Yo'okop. In Nohcacab, in 2003 and 2004, the excavations of two buildings of this type were conducted, one in the form of "L" and another as "T" (Johnstone 2004a; Shaw 2004; Shaw and Johnstone 2006).

In order to test whether these buildings belong to this Post-monumental period, it was decided to excavate two buildings of its type in the center of the settlement of San Felipe, which was one of the most interesting contexts of the region. These structures, Structures N4E5-6 N4E4-3, were designated Operation 9 and 10 respectively. Both buildings were originally documented in 2008, when the topography of this settlement was recorded (Shaw and Flores 2008).

Along with the interest of determining the chronology and nature of these constructions, an additional reason for conducting these extensive excavations was their location and context. These structures lie right in the middle of the main square of the settlement, Plaza A of San Felipe (Figure 270); furthermore this is the terminus area of the causeway connecting the North Group with the South Group (Figure 271). Therefore, in addition to the characteristic of the buildings, the results of these excavations also will give insights that would help to interpret the possible roles that this road could have had.

Besides these two extensive excavations (Operations 9 and 10), in previous seasons, the project had already conducted two test pits in the same area, Operations 4 and 6 (Flores and Shaw 2010; Huerta 2013). The results of these previous operations have shown that this square has had a long occupation, which goes from the Late Formative to the Terminal Classic.

Furthermore, some altars and shrines Postclassic on top of various structures and in other places of the site, suggesting that there was an occupation in this period, or, at least, there were occasional visitors who built these kind of structures (Shaw and Flores 2008).

In addition to the ceramic samples, Operations 4 and 6 showed that this square had five construction phases, evidenced by a series of plaza surfaces or floors that had a stucco surface. Stratigraphic data from these previous operations suggest the sequence of layers to be found in these extensive excavations. This previous information also will permit us to conduct comparisons with the results of Operations 9 and 10. All this will give us the elements to locate these constructions within the general stratigraphy and chronology of this

settlement (Flores and Shaw 2010; Huerta 2013).

Excavations conducted as Operation 9 are described in Chapter 35 of this volume. In this section, we only concentrate on the process of the excavation of Operation 10, although, because its proximity and relationship in this context, we cannot ignore the similarities and differences that both buildings had.

Apart from these two structures, in this context, adjacent to Structure N4E4-3 (Operation 10), is Structure N4E4-9, a range structure that appears to be directly attached to the structure in the form of a "C". It is noteworthy that this building was not affected by our excavations, as the boundaries of Operation 9 and Operation 10 were established right at the edge of this construction.

San Felipe's Structure N4E4-3 is a C-shaped, open-fronted structure, which gets its name from the way its walls are arranged. Basically, these structures are formed by a long wall that is attached to two short perpendicular walls, which are located at each of its ends, which gives the appearance of a letter "C".

These walls are a foundation or *tzol tunich* ("aligned stones" in Maya Yucatec), which served as the basis for wooden palisade or walls built with perishable material. These walls, in turn, are the limits of the inside area of the "C," which was roofed with organic materials. Next, the processes performed during the excavation of Operation 10 are described.

Excavation

Structure N4E4-3 measures 20 x 10 m, with an average height of 1.5 m. It is located in an area with medium-high forest. Therefore, the first task carried out in this operation was to clear the structure and its peripheral area from all vegetation except trees (Figure 285). After this, we proceeded with the establishment of the grid in order to delimit the units of excavation.

This excavation was divided into 19 suboperations, which varied in size according to their position on the structure (Figure 286). This division, besides providing better organization during the process of excavation, also allowed better control of materials that were extracted from each of these units. The position of the suboperations was related to the interior and exterior of this construction, that is, the units were placed inside and outside the building, in order to compare and contrast the contexts of activity in each one of these spaces. It is noteworthy that, due to the location of the architectural components of this construction, the original grid was modified to match the walls and items that were discovered during the excavation.

Units from 10m to 10p were located on the front and outside of Structure N4E4-3, while the rear part corresponded to Units 10m to 10p. Similarly, the inner area was divided into several sub-operations that were named as Units 10e to 10l. These indoor units also were subdivided into lots that corresponded to its relation with the

Figure 285. San Felipe, Operation 10, Structure N4E4-3, Vegetation Removal

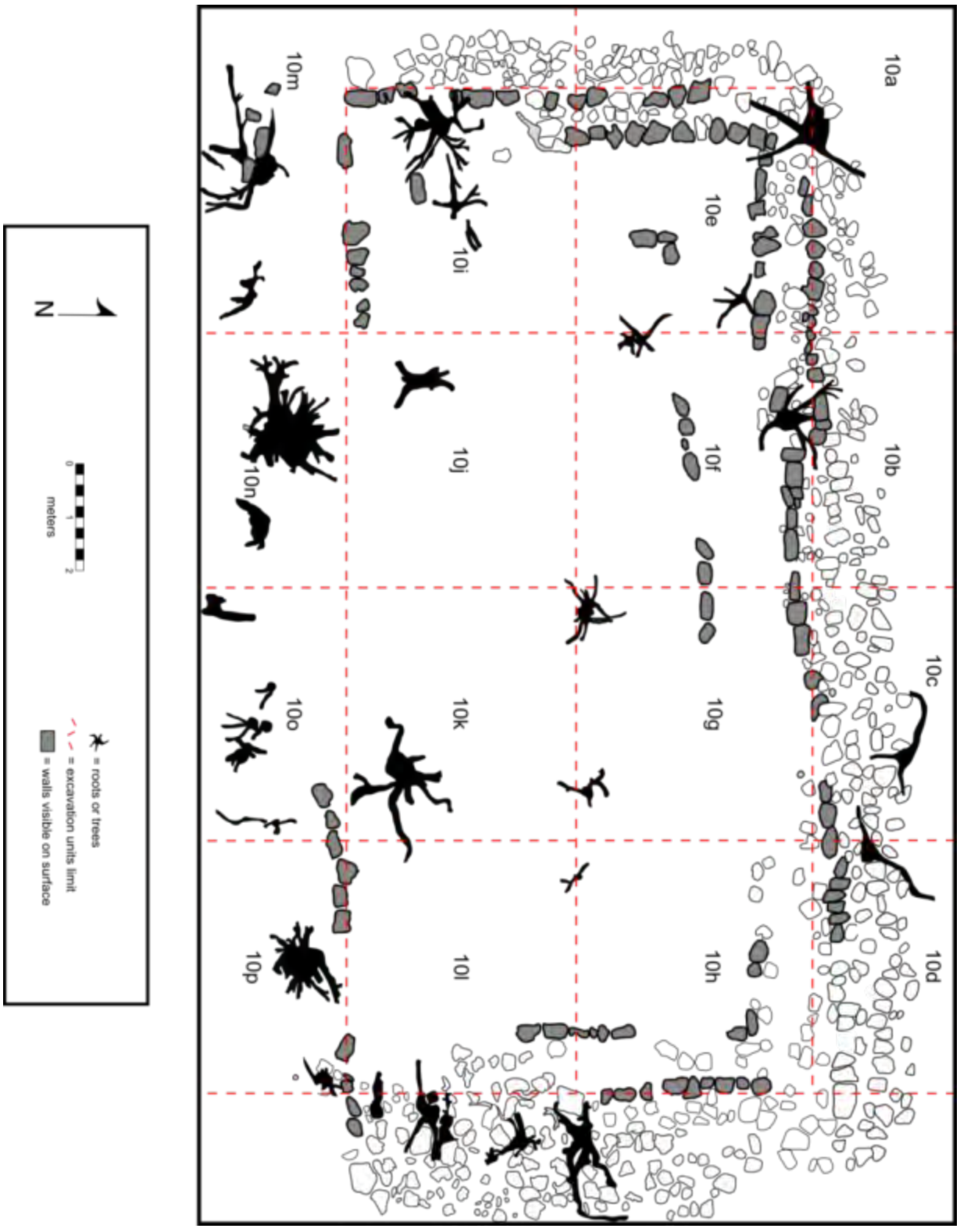


Figure 286. San Felipe, Structure N4E4-3, Operation 10, Plan of Suboperations

architectural elements that were found, such as a C-shaped bench, the wall of Structure N4E4-3, and with the different change in color of the sediment.

In addition, Units 10q, 10r, and 10s were placed at the east end of Structure N4E4-3, right in the area where it overlapped with Structure N4E4-9, in order to establish the physical boundaries of the C-shaped structure. All these suboperations in turn were divided into lots according to the context or the variations that were found during the excavation.

Exterior: front area (Sub-operations 10m-10p)

The location of these units was related to an alignment of stones that were visible in Sub-operations 10i and 10j, which had been supposed to be part of the front wall of this construction (Figure 287).

These suboperations had an average width of 2 m in the central part of the operation, while at the west end their width was 40 cm. At their other end, *i.e.*, on the east side, the width was 2.20 m. This variation in width was because the layout of the grid was traced from the center of the operation, aligned with the north, and using as reference a few segments of walls that were visible on the surface. However, with the advance of the excavation and the discovery of the walls of the structure, we realized that in reality the alignments we used as a reference for the grid followed another direction, causing that the grid to not be parallel with the walls of Structure N4E4-3.

The length of these units was more standard (4.60 m), with the exception of the Unit 10m that corresponded to the southwest corner of Structure N4E4-3, since it had an L-shape (Figure 287).

In all these units just one cultural level was excavated, Level 1, Lot 1. This level consisted of a silt-clay sediment, with a dark grayish brown color (10 YR 3/2), which was mixed with various medium and small stones (about 20 x 30 cm to 5 x 10 cm on average). Due to the presence of some large trees, as well as many roots, some sections of these units were not fully excavated.

On average, these units were excavated from 10 to 40 cm in depth, with the deepest area corresponding to the southwest corner. The result of the excavation of these units led to the discovery of all of what we thought was the front wall of Structure N4E4-3, was actually the front wall of an older platform, upon which the C-shaped structure was constructed. It is noteworthy that this entire front wall was not found in all units, as it was missing in some sections, located in the Suboperations 10n and 10o (Figure 288).

Besides the discovery of the entire front wall in Suboperation 10m, a group of stones was located at its front side. These stones seem to have been a sort of step for access to the platform and the open-fronted structure (Structure N4E4-3). This step was built with well-cut stones of different sizes, which must have been taken from older structures (Figures 289). This step was excavated as Level 1, Lot 4 and the ceramics found did not diff from the samples found in the rest of the units in this frontal area.

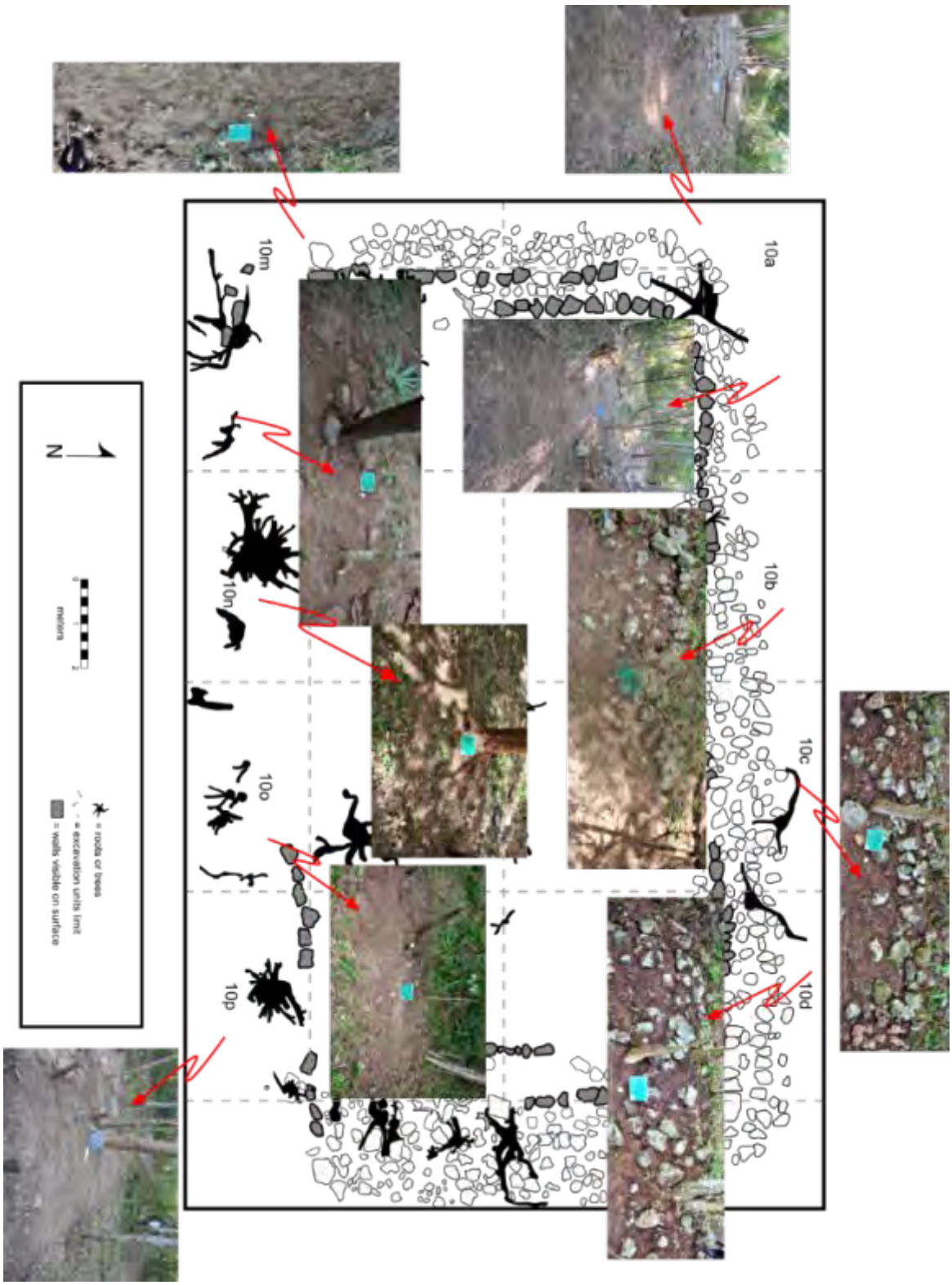


Figure 287. San Felipe, Structure N4E4-3, Operation 10, Exterior Surface

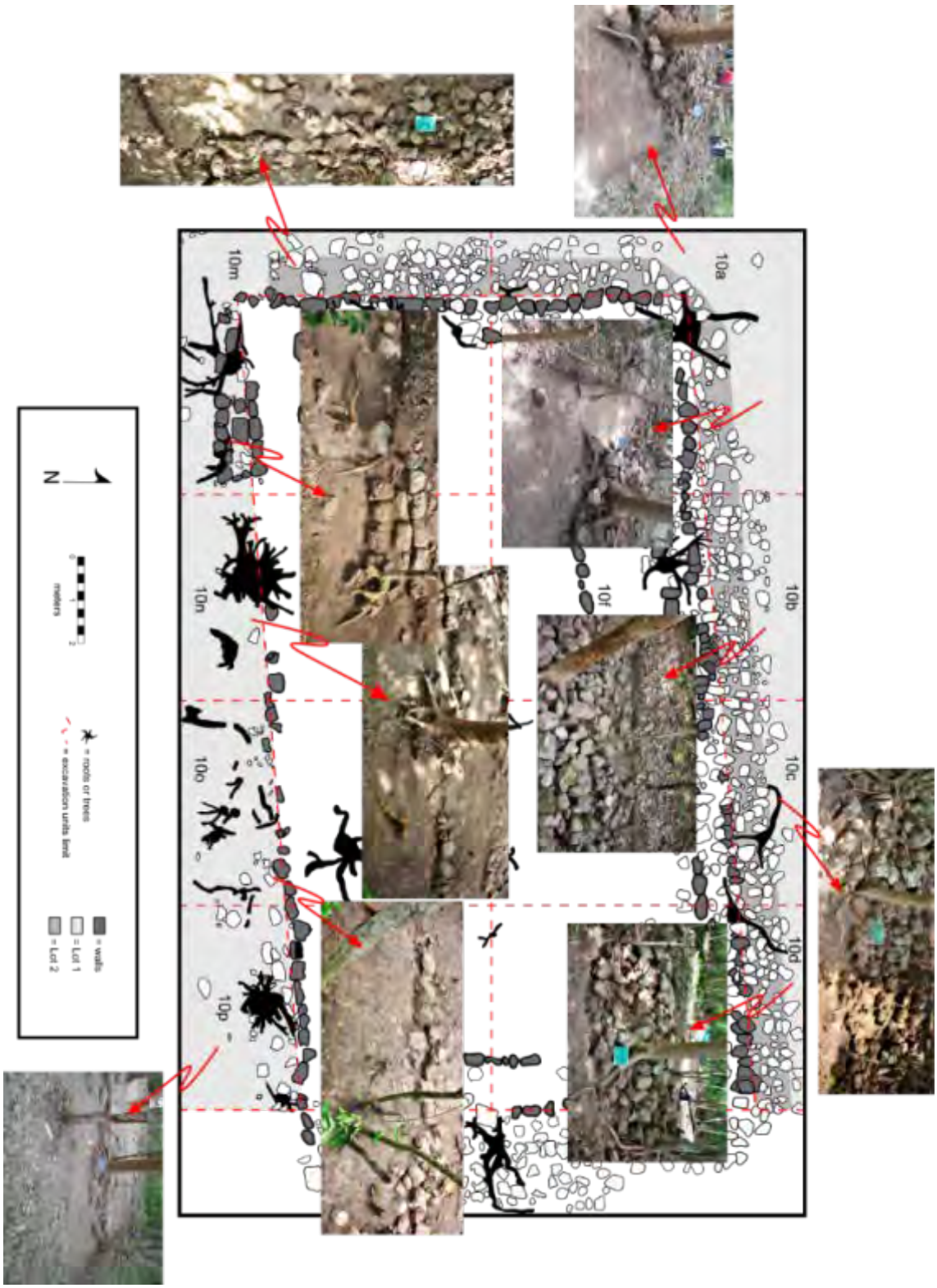


Figure 288. San Felipe, Structure N4E4-3, Operation 10, Excavated Exterior

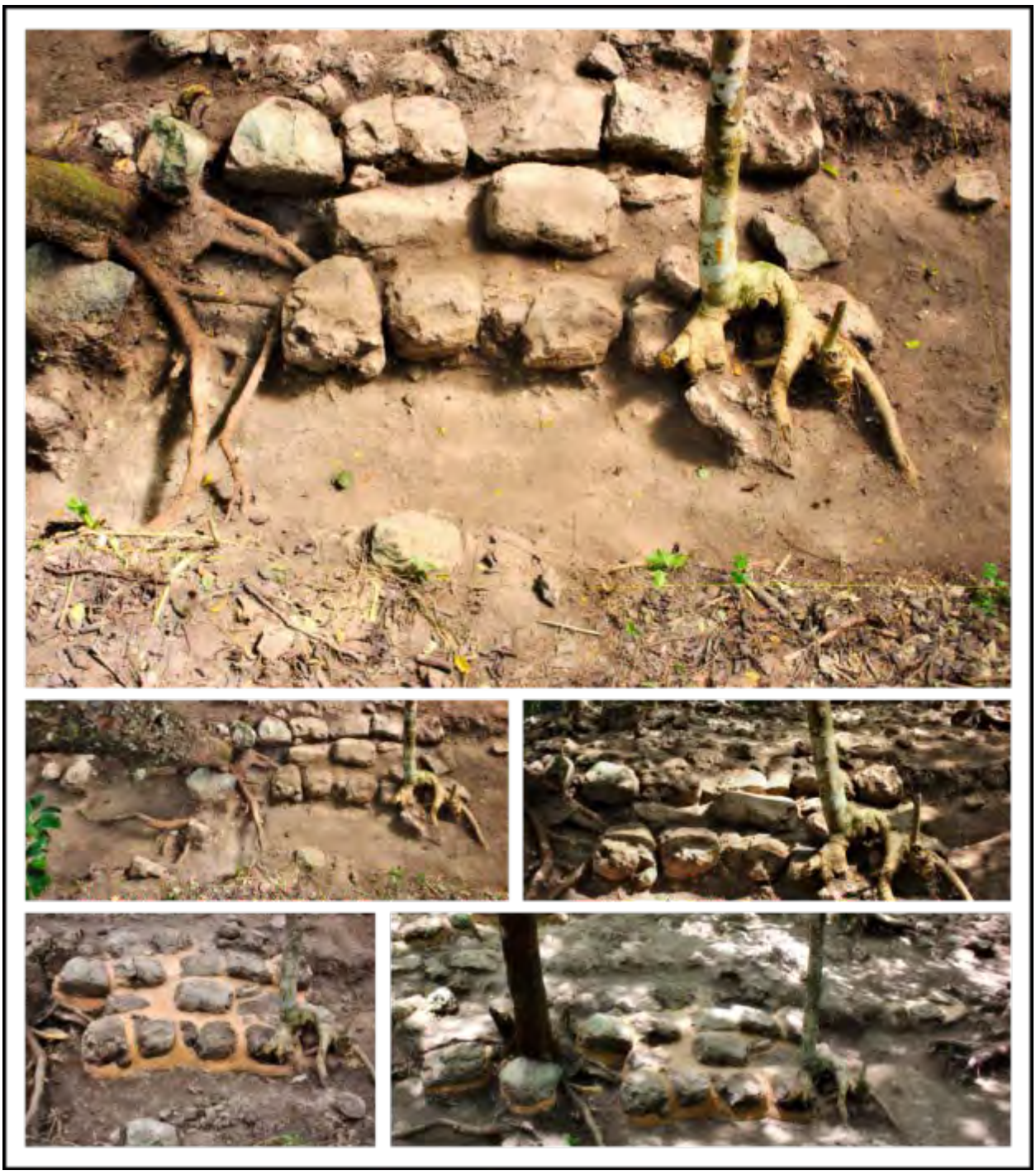


Figure 289. San Felipe, Structure N4E4-3, Operation 10, Photo Mosaic of Excavated Stairs

In Suboperation 10p, right on the part next to the wall, a number of stones that also appeared to be another step were located. However, a large tree was located right in that position; as a result, this set of stones had been displaced from its original position. This caused these stones to not have a defined arrangement, giving the appearance of being elements from the collapse instead of an architectural feature. Nevertheless, these stones were left *in situ*, assuming that they were once were part of an architectural element destroyed by the tree.

Ceramics in these subunits was very abundant, with a total of 760 fragments were recovered. Of this sample, only 308 were identified because the rest were in a very poor state of preservation. While this sample includes examples dating from the Middle Formative, Late Formative, and Early Classic, the bulk of the fragments are Late Classic types, dominated by Muna Slate and Yokat Striated var. Yokat (see Chapter 40).

Besides Level 1, Lot 1 that was found in all excavation units, Suboperation 10m was divided into three lots. Lot 2 of this unit corresponded to the part where the collapse of Structure N4E4-3 was, while Lot 3 was the collapse area between the eastern and western limits of the excavation unit. As was already mentioned, Lot 4 of Suboperation 10m corresponded to the area of the step. Ceramics from these lots were exclusively Terminal Classic, mostly represented by samples of the types Yokat Striated var. Yokat and Muna Slate.

Exterior: rear area (Sub-operations 10a-10d)

This section of Operation 10 was divided in a manner similar to the external frontal area. Three suboperations were plotted, Units 10b, 10c, and 10d. These measured 4.6 m long and were of a variable width, which was based on the distance from the back wall to the limit of the unit. In the narrowest part, these units were 60 cm, whereas in the wider they exceeded 2 m (Figure 287).

Suboperation 10a, like 10m, had an “L” shape and corresponded to the northwest corner of Operation 10. Likewise, this suboperation was divided into three lots. Level 1, Lot 1 corresponded to the flat part of this unit, *i.e.* areas that were outside the collapse of the walls of Structure N4E4-3 (Figure 288). This collapse was designated as Level 1, Lot 2, while Lot 3 was a set of irregular stones found in the northern part of the unit, which seemed to form an architectural feature. However, once the soil was removed, we realized that rocks were part of the collapse.

The pottery of these three lots of Sub-operation 10a was dominated mainly by examples of types from the Terminal Classic, such as Muna Slate, Yokat Striated var. Yokat, and Holactún Black on Coarse Cream (see Chapter 40).

Level 1, Lot 1 of Units 10a to 10d consisted of a layer of silt-clay sediment of a dark brown color (7.5 YR 3/2), which was mixed with stones from the collapse (about 40 x 50 cm on average) and an abundance of gravel (Figure 288). It is noteworthy that the sediment of this Lot 1 was mixed with a whitish spots (10YR 8/2), which suggested the existence of a stucco surface.

Level 1, Lot 2 of these units consisted of irregular stones, which once formed the walls of this structure. These stones from the collapse were recorded in the position where they were found (Figure 288). Following this, they were removed in order to reveal the rear wall of Structure N4E4-3.

Ceramics from all of these units, although including examples dating back to the Middle Formative, were mostly from Terminal Classic, mainly the types Yokat Striated var.

Yokat and Muna Slate (see Chapter 40).

The excavation of Level 1 ended when a pink gray (7.5 YR 6/2) sediment was found; this seemed to be part of a plaster surface that also concluded right at the base of the walls of Structure N4E4-3. This sediment was not excavated because it corresponded to the level of occupation of the building.

Interior: roofed area (Sub-operations 10e-10l)

These suboperations covered the entire area inside the C-shaped Structure N4E4-3, including the walls that comprise it. These units were, in turn, were divided into several lots according to context. However, because of the presence of a line of stones visible on the surface, aligned with the end of the east and west sides of the bench, it was assumed that the interior area of this building was divided into two areas, one indoor and one without roofing. Therefore, Units 10i, 10j, 10k and 10l were divided into Lot 1 and Lot 2 (Figure 290).

Basically, Level 1, Lot 1 was the surface area of the inner roof of the C-shaped structure. In all units included in this space (10e to 10l), Lot 1 was a sandy-clayey sediment, gray in color (10YR 5/1), which was mixed with gravel at a low frequency. Because of the abundant secondary vegetation that exists in the area, this deposit had many small roots. In addition to the above, in the area of these units, primarily in the northern portion, some scattered stones that came from the collapse of the wall of Structure N4E4-3 were found. Another possibility is these rocks had been moved there in order to reuse them in later buildings.

It is noteworthy that this sediment was not distributed evenly across all these suboperations, but was placed on a descending slope diagonally from Unit 10e to Unit 10l. This distribution resulted in that the units closer to the northwest corner, Level 1, Lot 1 had a greater thickness (5 to 10 cm), while those that were located in the southeast corner had very little sediment or lacked it entirely (0 to 5 cm) (Figure 291). In areas where there was no sediment, as in some parts of the Suboperations 10k and 10l, the dry core fill of the platform that is the base for Structure N4E4-3 was partially exposed (Figure 291). While no ceramic samples were obtained from some units in Level 1, Lot 1, most of the fragments that could be identified belonged to the Terminal Classic, mainly from the types Yokat Striated var. Yokat and Muna Slate (see Chapter 40).

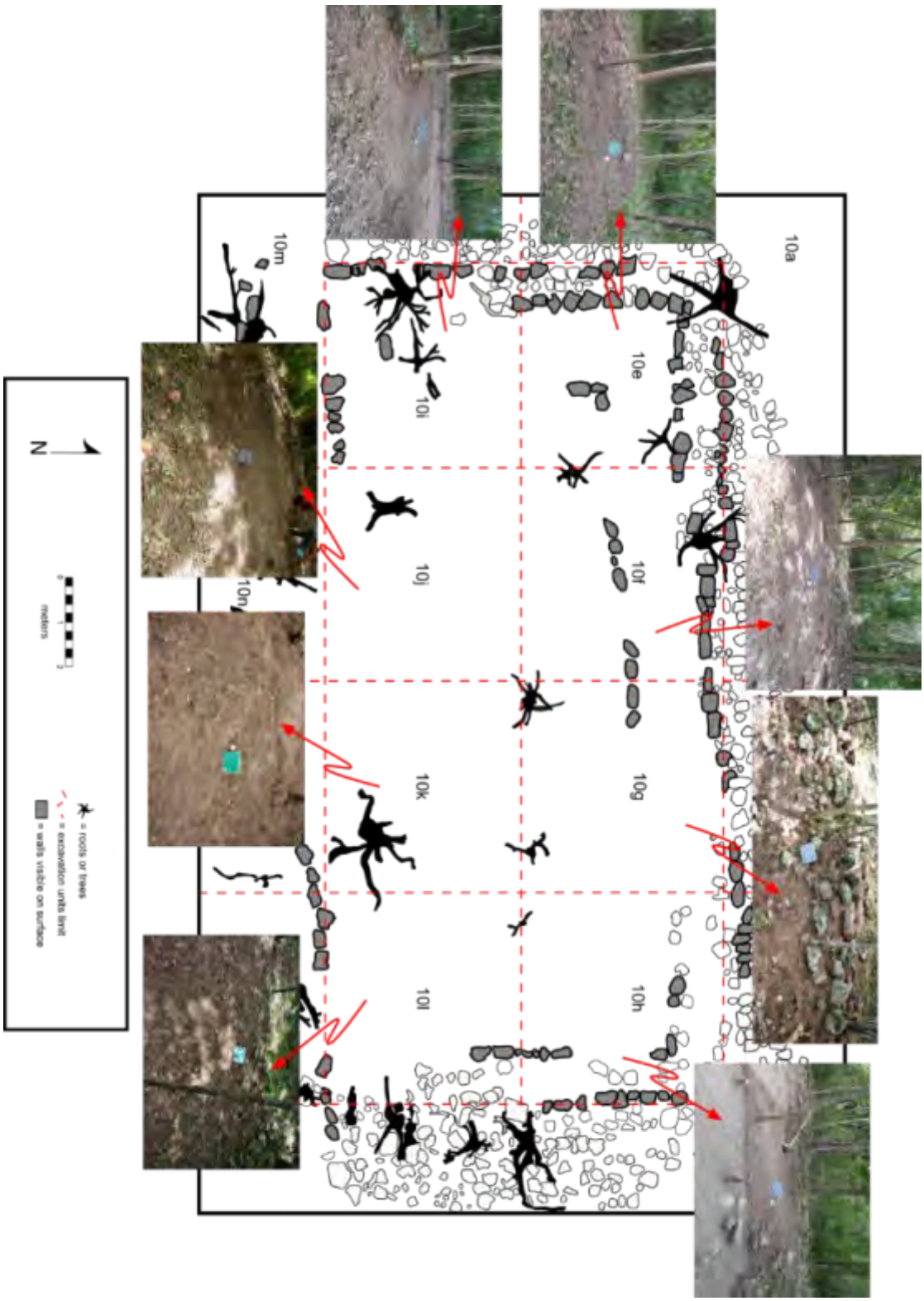


Figure 290. San Felipe, Structure N4E4-3, Operation 10, Interior Surface

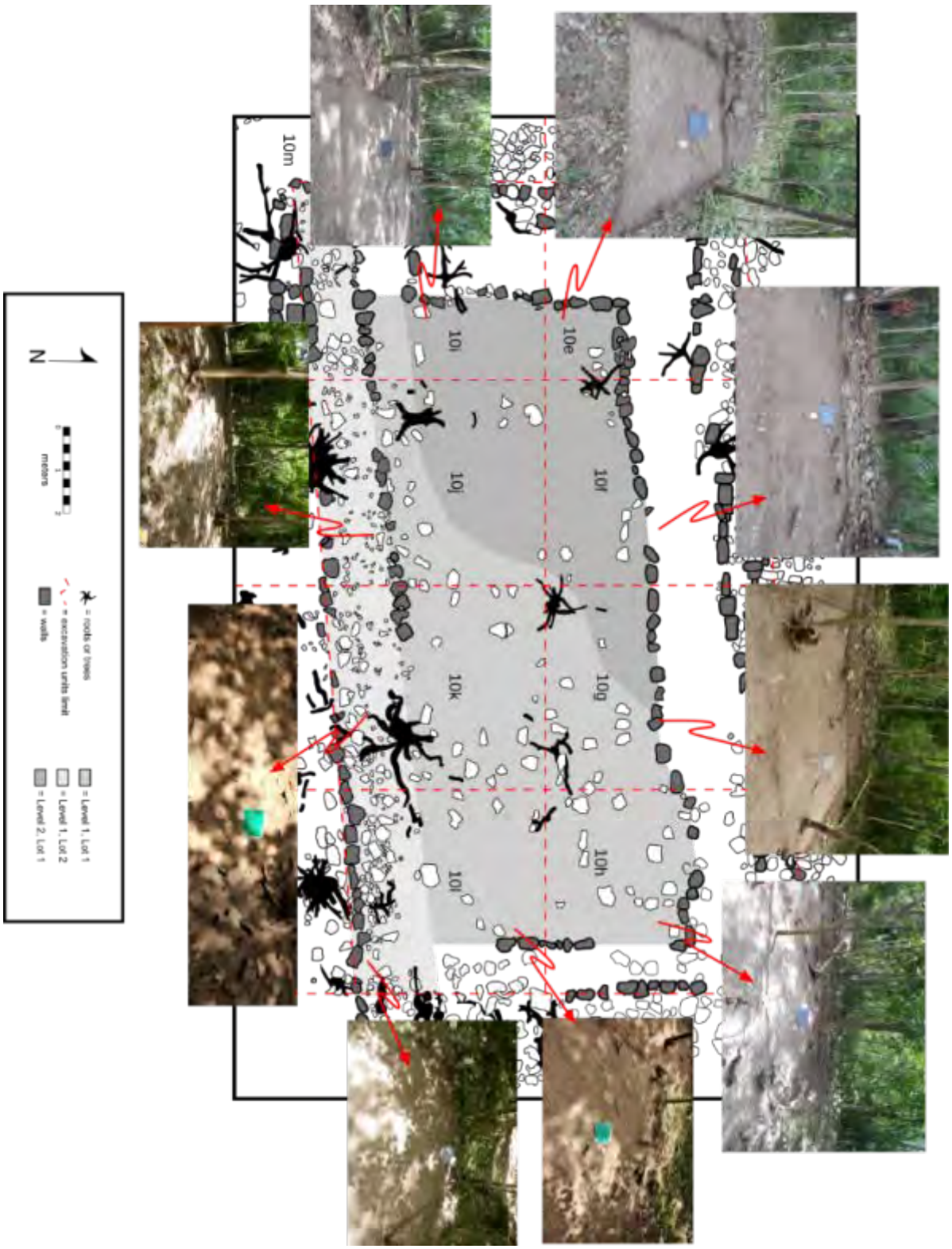


Figure 291. San Felipe, Structure N4E4-3, Operation 10, Excavated Interior, Level 1

Once Level 1, Lot 1 was removed in all units, a sediment of whitish coloration was discovered that had a high concentration of stucco. This appeared to be a highly eroded plaster floor, which was named Level 2, Lot 1 (Floor 1). This sediment was not found in all indoor units of Structure N4E4-3, instead it was very localized, mainly within units 10e, 10f and 10i.

This sediment was composed of a brown grayish sediment (10YR 3/2 to 10YR 6/1) with a high content of *sascab* and/ or stucco, mixed with several small stones (about 10 x 20 cm) and fragments of floor or stucco plaster from the walls. However, no surface was located to affirm that these fragments are part of a floor; therefore it was assumed that this layer is the result of the collapse of a coating on the walls and the surface of the bench as well as the walls of Structure N4E4- 3 (Figure 291). Ceramics from Level 2, Lot 1, located in these units mostly belong to the types Yokat Striated var. Yokat and Muna Slate from the Terminal Classic.

Once this layer was removed another layer of a whitish sediment (10YR 4/1 to 10YR 5/1) was located, which was much more compacted and had a high concentration of stucco. Level 2, Lot 2 seemed to be the remains of a fairly eroded floor, which was named Floor 1. This floor actually was more like a tamped floor and was also associated with the surface of the bench, which makes us suppose that this was the final surface of the inner area of Structure N4E4-3. Like the previous lots (Level 2, Lot 1), this deposit (Floor 1), was located only in some sections of the Units 10e, 10f, 10g and 10i and was absent in the rest the interior zone of the building.

Ceramic found in Level 2, Lot 2 were not very different from those obtained in previous levels and lots, as they were mostly composed of Terminal Classic samples, although four fragments of Chen Mul Modeled censers were also located (see Chapter 43).

Those sections where Level 2, Lot 2 (Floor 1) was not located were excavated as Level 1, Lot 3, since there were no change in the color of the sediment that would indicate a change of level. Level 1, Lot 3 was located in Units 10g, 10i, 10j, 10k, and 10l (Figure 291). Basically, Level 1, Lot 1 and Level 1, Lot 3 were comprised of the same type of sediment. The change between Lot 1 and Lot 3 occurred at the level where Floor 1 (Level 2, Lot 2) was located in the units where it was found. This point was used as a depth datum for the internal area, because it would have been the original level inside Structure N4E4-3. However, in all units containing Level 1, Lot 3, Floor 1 was lost due to environmental factors and erosion. As for the ceramics located in these units, the sample was similar to that obtained in previous lots and levels, dominated by Terminal Classic types, such as Yokat Striated var. Yokat and Muna Slate.

The excavation of this inner area ended when stones composing dry core fill was exposed, which stretched the entire length of these units (Figure 292). This dry core fill consisted mostly of rough stones of different sizes, although it is noteworthy that façade stones, vault stones, and even a *metate* fragment were also included (Figure 293).

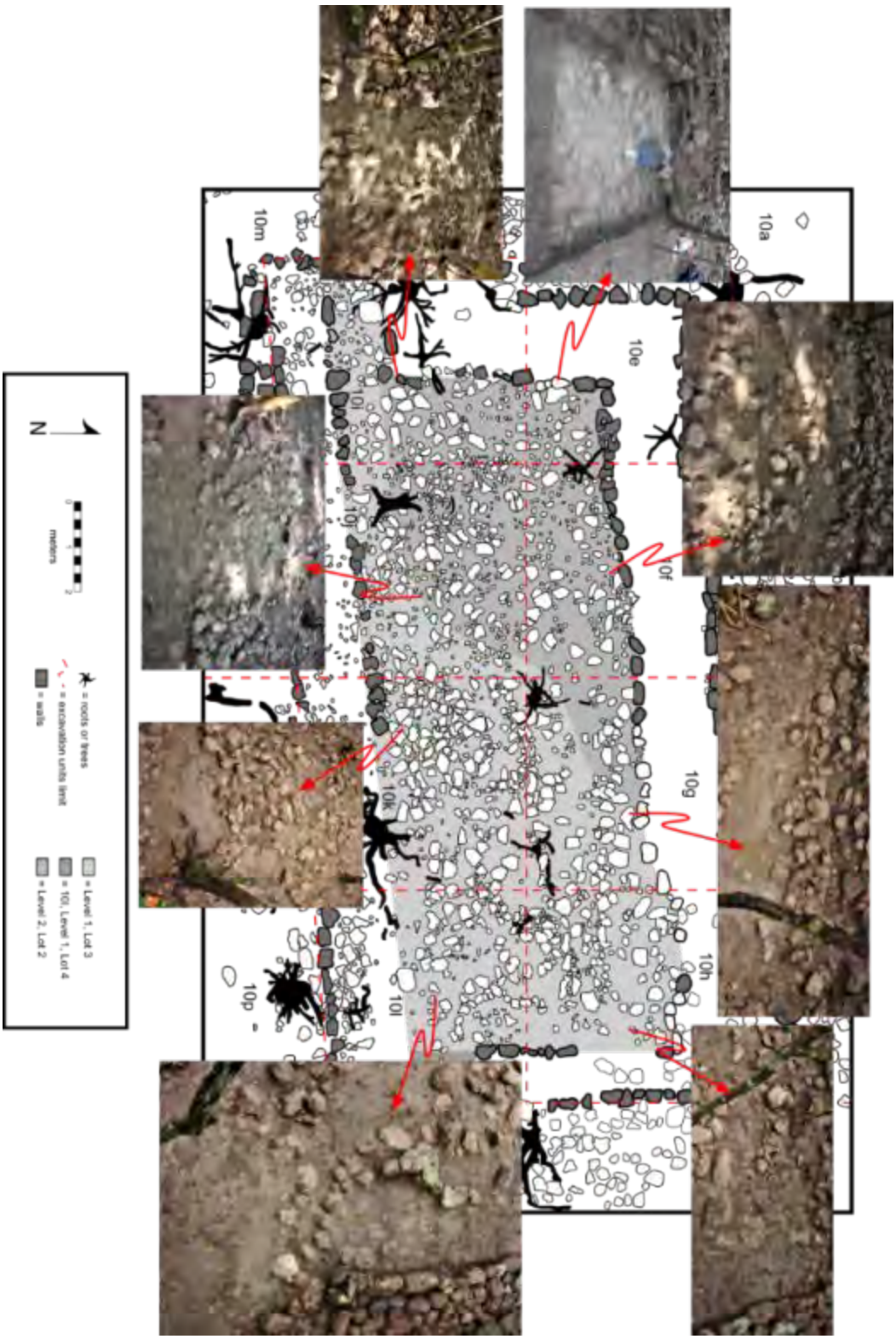


Figure 292. San Felipe, Structure N4E4-3, Operation 10, Excavated Interior, Level 2

Figure 293. San Felipe, Structure N4E4-3, Operation 10, Recycled Architectural Elements

The discovery of these fragments makes us speculate that the entire platform under Structure N4E4-3, as well as the structure itself, was built with materials reused from previous constructions.

Interior: non roofed area (Sub-operation 10i-10l)

This section of Operation 10 corresponded to the area between an alignment that was at the same line as the eastern and western ends of the bench and the wall of the platform where the Structure N4E4-3 was found. This area was excavated as Level 1, Lot 2 of Suboperations 10i, 10j, 10k and 10l, although the latter also included Level 1, Lot 4 (Figure 291). .

This area showed a slight slope running from north to south. The height difference between the two areas was 37 cm at its lowest point. Sediment that existed in this area was silty-clay, with a brown (7.5 YR 5/2) coloration. Excavation of the area concluded when all stones in the fill were cleaned, exposing the structure that is the base of the C-shaped construction (Figure 292).

During the excavation of this area, particular attention was paid to search for postholes, as we thought that this area could be a courtyard, where there may have been poles that supported a covered area. However, no evidence of such postholes was located. Ceramics associated with this area were dominated by two types, Yokat Striated var. Yokat and Muna Slate, both from the Terminal Classic.

While these excavation tasks were carried out in the inner surface of Structure N4E4-3, other members of the team concentrated on excavating the element that had been identified as a wide bench attached to the wall of the C-shaped building.

C-shaped bench (Sub-operations 10e-10i, 10l, 10r and 10s)

Because of the abundant litter leaf and vegetation that covered the area, this element was not obvious on the surface. Only a few stones of some sections protruded; therefore, at first it was thought that these items belonged to the wall that formed Structure N4E4-3. However, as the excavation progressed, it was discovered that these stones formed a wide bench, which was attached to the inner wall of Structure N4E4-3 and, therefore, also had a “C” shape.

This bench was present in the Units 10e, 10f, 10g, 10h, 10i, 10l, and part of the Units 10r and 10s (Figure 290). The feature was formed by a front wall of well-cut stones, which had a fill made of rough stones, whose rear boundary was the walls of Structure N4E4-3. Many of the stones forming this element, both in the wall of the bench and the fill, were well-cut and must have been taken from earlier structures. On its eastern and western side, the bench was 2 m wide from the wall of the C-shaped structure, while in the north, the longest side, the bench had a width of 1.2 m (Figure 294).

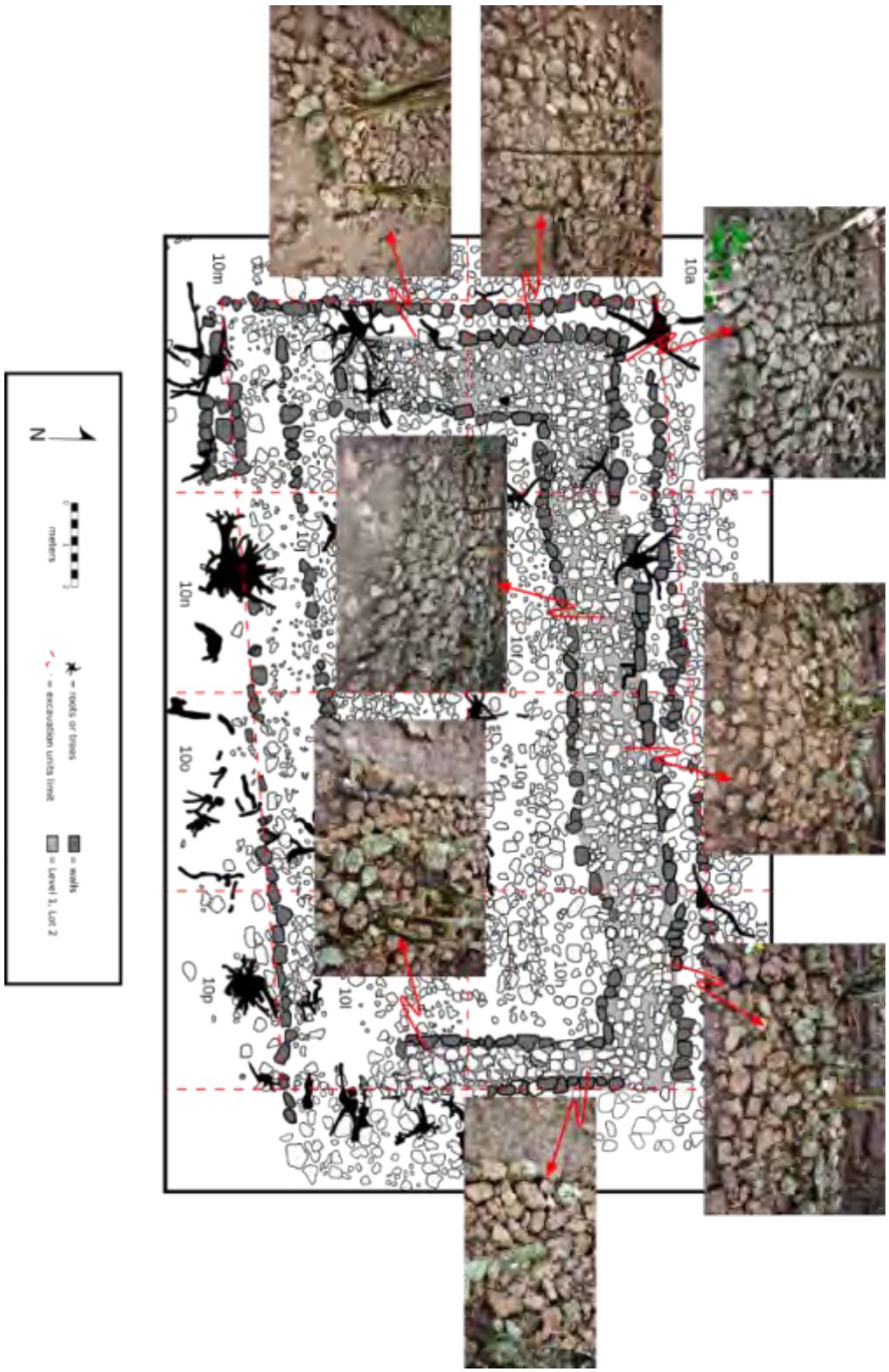


Figure 294. San Felipe, Structure N4E4-3, Operation 10, Bench Elements

Excavation of this element only consisted of the removal of sediment that existed between the stones that formed the fill of the bench; no part of this architectural feature was moved or removed. This sediment was a layer of very dark brown soil (7.5YR 2.5/2), which was mixed with small, irregular stones about 5 x 7 cm in size.

Ceramics located in the fill of the bench were similar to those obtained in other parts of the structure, and most are examples from the Terminal Classic, as evidenced by sherds of Yokat Striated var. Yokat and Muna Slate. In addition, three fragments of a Chen Mul Modeled censer were located in the northwest part of the bench (see Chapters 41 and 43). Overall this bench was very well preserved and there were only a few missing sections, mainly in Suboperations 10f, 10g, and 10h (Figure 294).

Wall of Structure N4E4-3 (Sub-operations 10e-10i, 10l, 10r y 10s)

Like the bench, the back wall, as well as the eastern and western walls of Structure N4E4-3, was contained in several suboperations (10e, 10f, 10g, 10h, 10i, 10l, 10r, and 10s). This wall was actually a double wall, *i.e.* there were two rows of well-cut stones that ran parallel making a shape of a "C". The interior space formed by the two rows of stones was filled with irregular rocks and sediment. These parallel walls along with their fill formed a thick wall, which served as a base (*tzol tunich*) for the placement of poles that may have been the support for a roof built with perishable materials.

Stones forming this wall were also taken from previous structures, as they included well-cut stones that may have been part of the façade, stairs, and/ or walls. Some of the stones were large (50 x 70 cm) and may have originally served as door jambs of the older structures. Similarly, several rectangular and flat stones that might have been stones from a vault were also observed (Figure 295).

Excavation of this area consisted of the removal of sediment that was both on the joints of the stones forming the parallel walls, as well as in the fill of this double wall. This sediment had a dark gray color (10 YR 4/1), a silt-clayey consistency and little compaction. Ceramics located in this part of the wall was few compared to other areas, but were very similar, dominated by examples of the types Yokat Striated var. Yokat and Muna Slate from the Terminal Classic (see Chapter 40).

In general, preservation of this wall was good, since the first course was preserved almost in its entirety, except for a few missing stones that could have been removed when the building was not in use. This double wall, judging by the number of stones that formed the collapse, could have had at least three courses of stone, reaching a height of over 90 cm. In fact, there are two large stones of 70 cm in height that lie near the center of this construction, which were probably part of the jambs of another building. These rocks indicate the minimum height that this double wall must have had (Figure 295). It is possible that some of the stones that formed the double walls had been taken to form other walls that were located in the eastern section of the Structure N4E4-3, which will be described in the next section.

Once this double wall was completely exposed, it was observed that on the outside it was built over the wall of a platform, as well as that many of its stones that have been fallen still were in their original place (Figure 296).

Figure 295. San Felipe, Structure N4E4-3, Operation 10, Recycled Door Jambs and Vault Stones

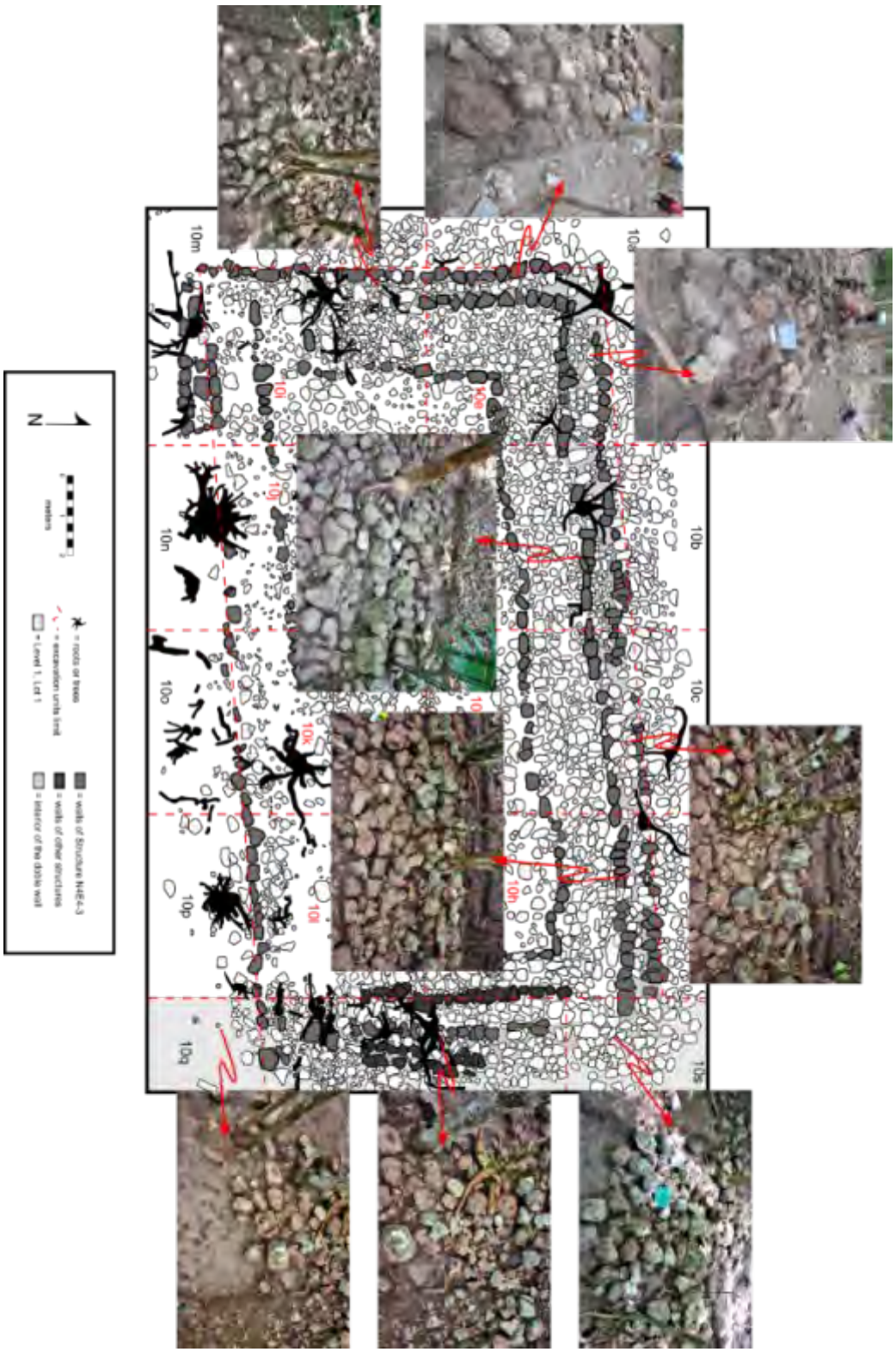


Figure 296. San Felipe, Structure N4E4-3, Operation 10, Double Wall Line

Some of these stones were rectangular and were placed vertically. Because of their shapes, it is likely that some of these stones may have been part of a vaulted structure, which was destroyed to build Structure N4E4-3.

Between the wall of the platform and the outside area of the double wall was a sort of quirk bead (*entrecalle*), which measured about 30 cm on average (Figure 297). Interestingly, this element existed only in the northern part of the double wall, while in the east and west this construction feature was not observed.

Eastern portion of Structure N4E4-3 (Suboperations 10q-10r)

Without doubt, this part of the excavation was the most complicated, not in terms of technical difficulty, but in its interpretation. This was because the area had several modification carried out when Structure N4E4-3 was already abandoned, or perhaps these alterations were those that caused its destruction. These changes were basically a series of three walls that formed the foundations of later perishable constructions, which were directly placed on the bench and the double wall of Structure N4E4-3.

These three walls were built with stones taken from the bench or from the double wall, mainly from the west side of the C-shaped structure. Because of its simple construction, many of these stones are "loose" on the surface; therefore it is possible that many have been taken or moved again in recent times. For this reason, these foundation braces walls were difficult to define.

In addition to these three walls, the excavation of this area allowed the definition of the missing section of the bench and the double wall, a process that ended in the discovery of the C-shaped feature that these two elements comprise. However, during this process, it was observed that Structure N4E4-3 was attached to Structure N4E4-9. These data suggest that Structure N4E4-9 was cut and partially dismantled to build Structure N4E4-3, although it would be necessary to excavate Structure N4E4-9 in order to test these assumptions.

The excavation of this area basically consisted of the removal of a silt-clay sediment, brown in color (10YR 4/3), which was within the joints between the stones that existed in this area. For this reason, little pottery was located in these lots. What there was mostly belonged to the types Yokat Striated var. Yokat and Muna Slate from the Terminal Classic. This distribution of ceramic is consistent with the rest of the sample that was extracted from this construction (Figure 296). In addition to the examples from the Terminal Classic, within Suboperation 10r four Chen Mul Modeled sherds were located. These are probably more related to the series of walls that were placed on top of Structure N4E4-3 (see Chapter 43).

With the excavation of this area, the exploration of Structure N4E4-3 was completed. In parallel to the excavation work, the registration of all units was conducted. This process was conducted in a manner that provided two pictures of this construction, one was with all features and rocks as they had been found, and the second was when all rocks from the collapse had already removed (Figures 298 and 299). In addition to the plan and photographic record,

Figure 297. San Felipe, Structure N4E4-3, Operation 10, Feature within Double Wall

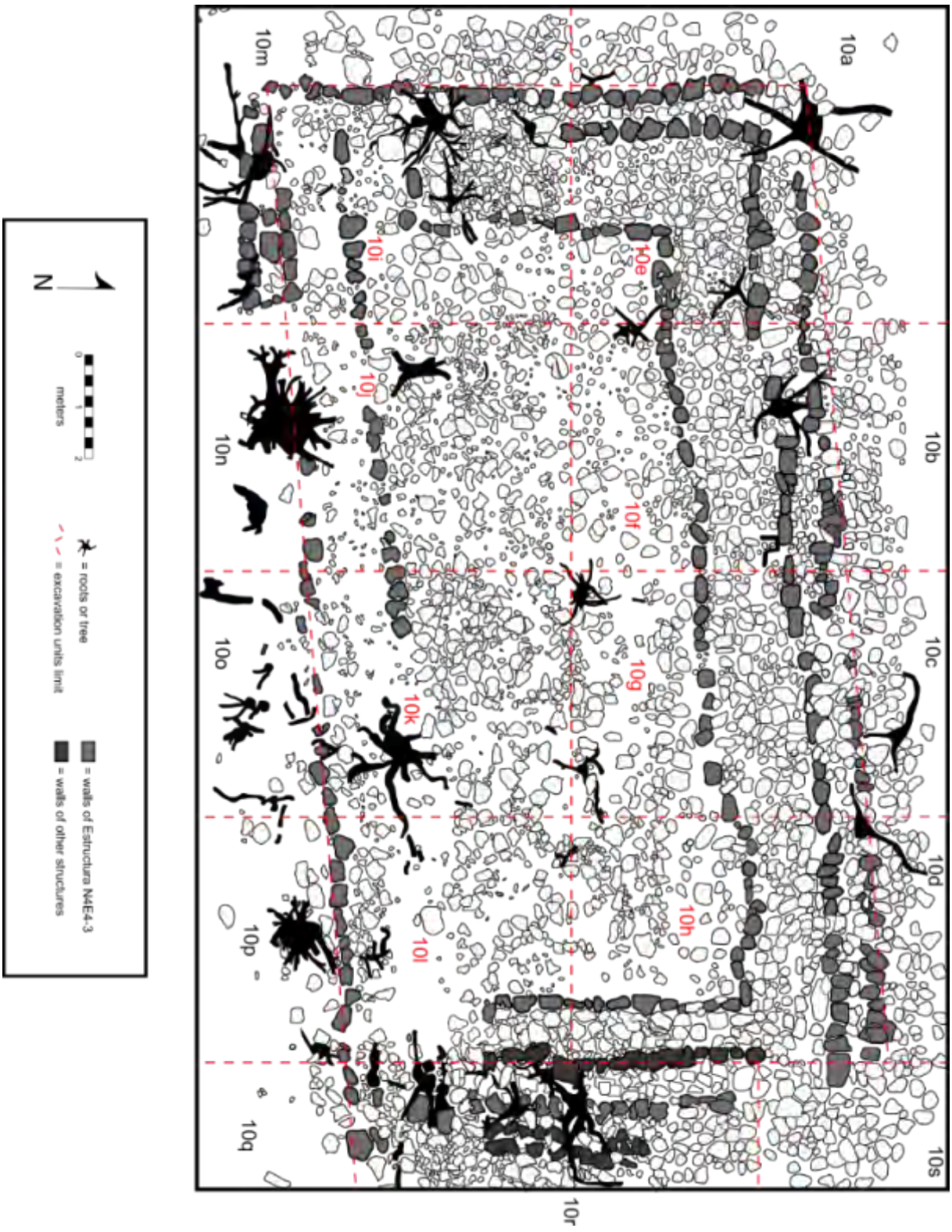


Figure 298. San Felipe, Structure N4E4-3, Operation 10, Excavated Plan

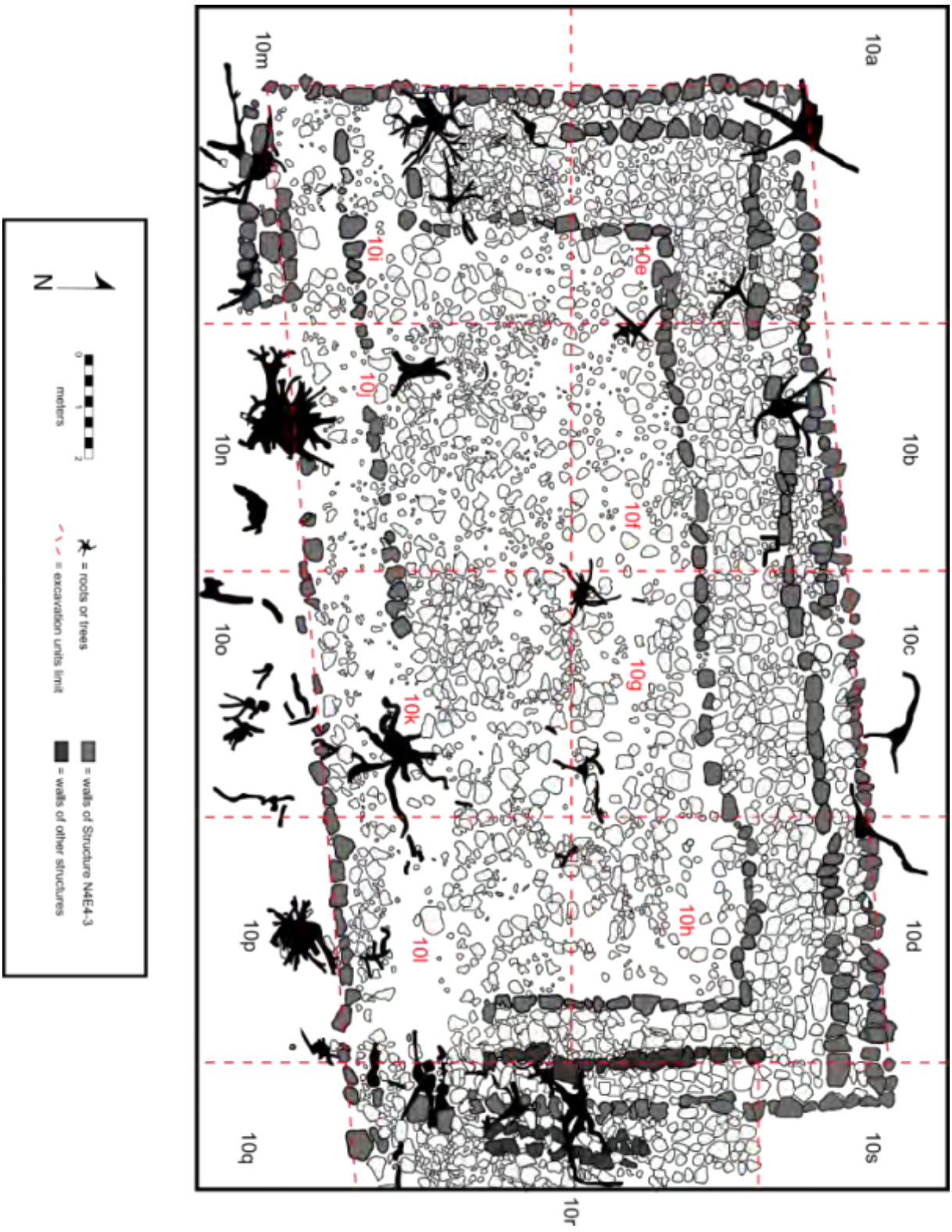


Figure 299. San Felipe, Structure N4E4-3, Operation 10, Consolidated

the micro-topographic recording of the area was conducted with a total station (also including Operation 9), in order to get more detail of this building and its context once it had been excavated (Figures 300 and 301).

Once all units in Operation 10 were excavated and recorded, we proceeded to perform the tasks of consolidating of the exposed architectural features, a procedure that was conducted in order to maintain the stability of this construction.

Consolidation

This process began after Operation 10 was fully excavated. This excavation revealed that in fact Structure N4E4-3 was much more complex than we had supposed, based on evidence that was observed on surface.

This consolidation process took place in the architectural elements that were exposed during excavation work, such as front, rear, and side walls of the C-shaped bench and Structure N4E4-3, as well as with the other three alignments that were found in the eastern part of the excavation.

The goal of carrying out the consolidation of architectural elements that were exposed was to ensure their preservation and reduce the effects caused by the archaeological intervention that we had conducted. It should be stressed that all the stones that made up the walls were consolidated in their original position. No reconstruction process was performed on any component of the construction.

In addition, the consolidation of the exposed elements would help in any future reconstruction of the building that might take place, as well as the restitution of their missing sections, because all elements were left in their original positions.

In order to complete this goal, the consolidation process began with the removal of the existing sediment from the interstices between the rocks. Therefore, the first step was to clean the elements to be consolidated. The ceramics obtained in the process of removing such sediment were very few, but they also dated from the Terminal Classic (see Chapter 40).

The existing sediment between the stones was replaced with a mixture of lime and *sascab*. Once this had dried, a paint made with a mixture of red soil or *chak lu'um* was applied in order to highlight areas that had been consolidated and give the structure a natural appearance (Figure 302).

It is worth noting that consolidation focused on the walls, but this also took place in some other parts where it was observed that the stability of this construction was at risk, therefore, the core fill at some sections was also consolidated (Figure 303).

Once the consolidation was completed on all the walls that had been exposed, we proceeded with the backfill of the entire excavation. During this latter process, first we put a fine layer of sediment at those areas that had been consolidated. In order to protect the walls, the sediment and rocks that had been previously removed were then replaced in all excavated areas (Figure 304).

Figure 300. San Felipe, Structure N4E4-3, Operation 10, Photo after Excavation and Consolidation

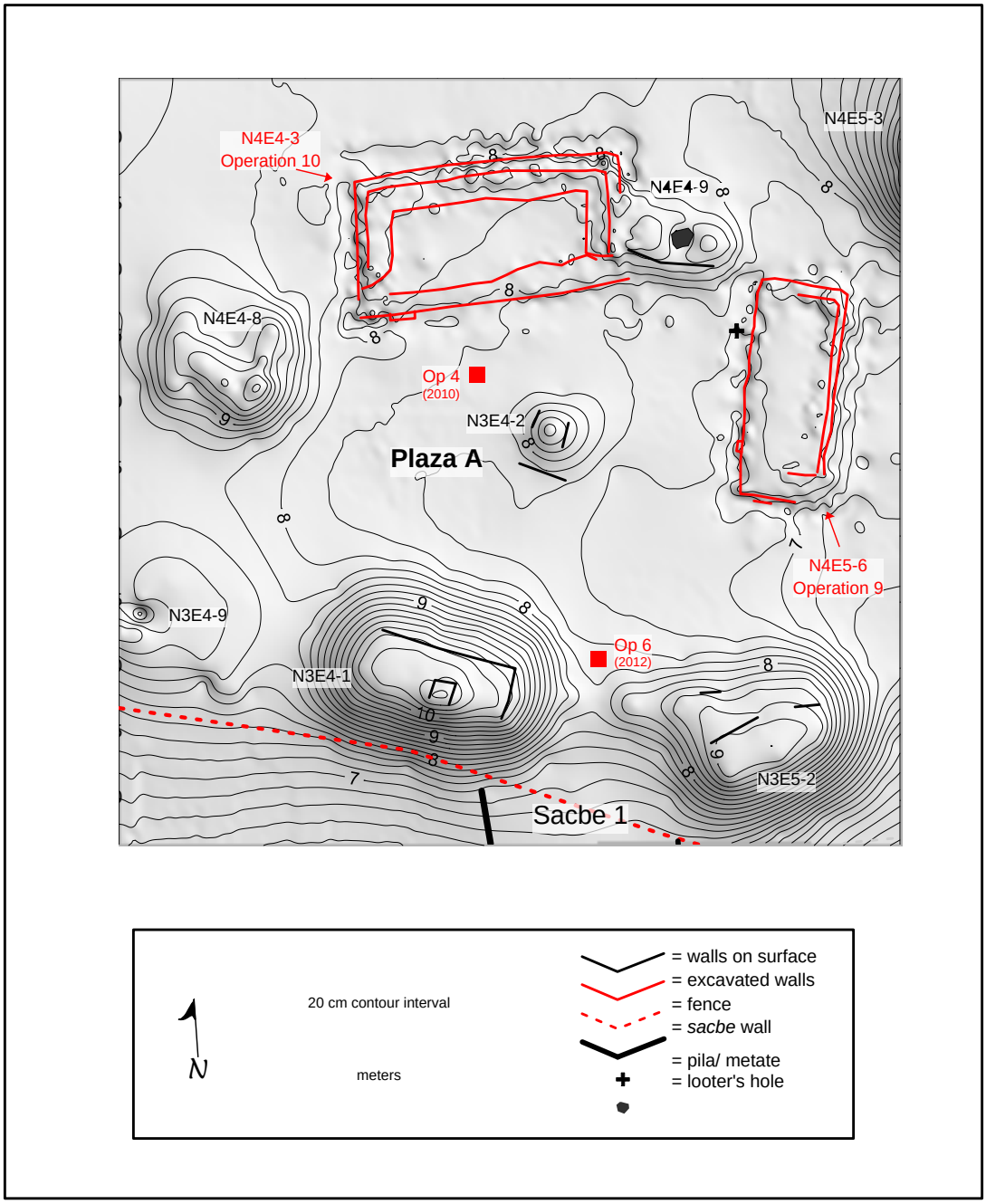


Figure 301. San Felipe, North Group, Operations 9 and 10, Plan after Excavations

Figure 302. San Felipe, Structure N4E4-3, Operation 10, Process of Consolidation

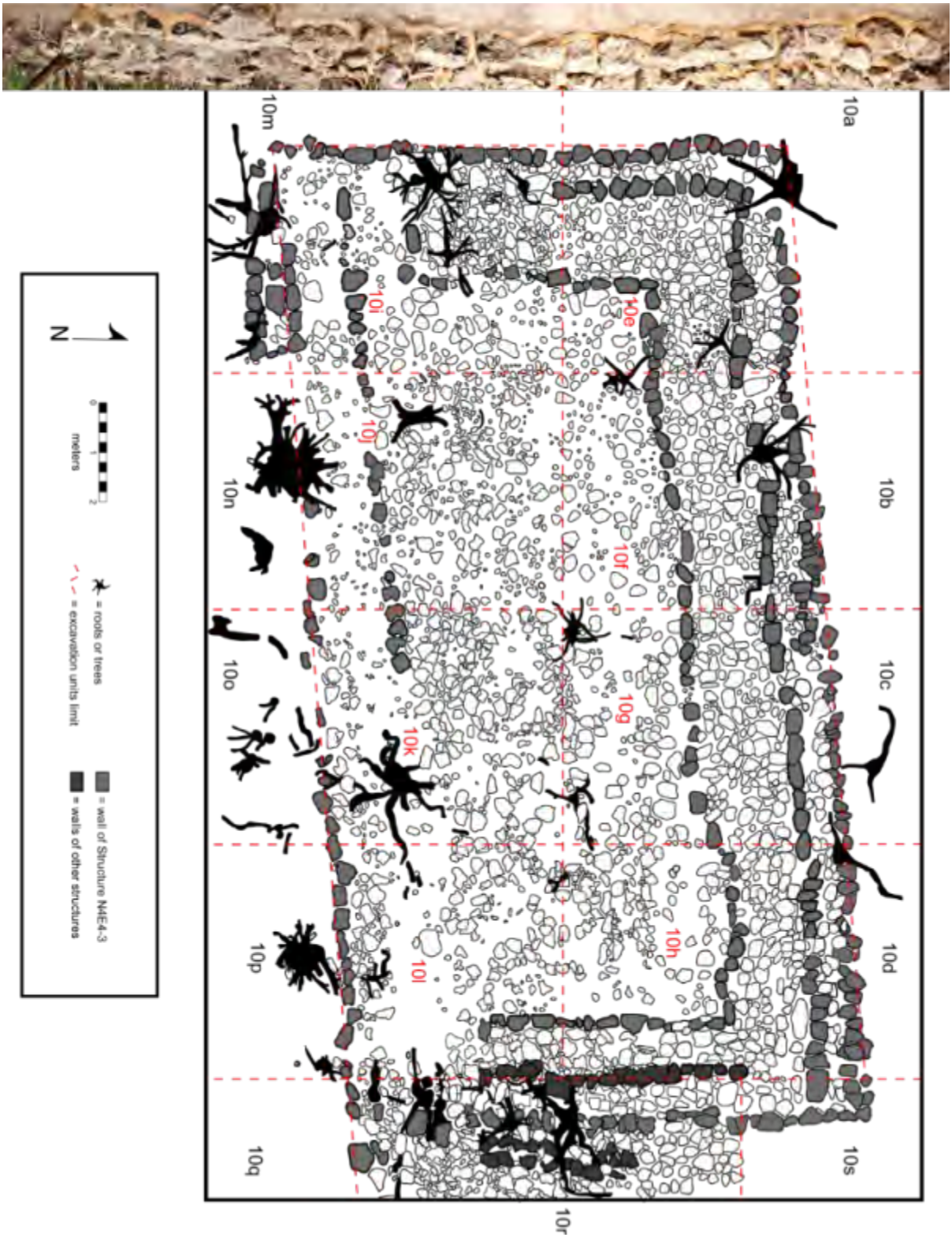


Figure 303. San Felipe, Structure N4E4-3, Operation 10, Consolidated Walls

Figure 304. San Felipe, Structure N4E4-3, Operation 10, Backfilled

Interpretation

The excavation of Structure N4E4-3 was more complex than we originally thought. This is because it was discovered that this construction comprises a platform that is the base for the C-shaped foundation brace. Additionally, the excavation of the operation revealed that this building was built reusing part of Structure N4E4-9, which was partially dismantled for this purpose. Besides this, in the east end of the building, a series of alignments that were possibly foundations of later perishable buildings were also discovered. These wall lines were built with stones taken from the Structure N4E4-3.

Based on the evidence of Structure N4E4-9 (Figure 301), it is likely that this building was a 30-m-long structure, perhaps formed by a series of vaulted rooms. In addition, because of its position at the center of Plaza A, the larger square at North Group, this range structure (Structure N4E4-9) must have had a leading role in this settlement, which is why it was decided to continue using this space.

While it is not possible to say exactly when this abrupt change occurred, it does not appear to have happened before the Terminal Classic. Although there are several sherds belonging to previous periods, the bulk of the ceramic samples date from the Terminal Classic, mostly evidenced by types of Yokat Striated var. Yokat and Muna Slate (see Chapter 40).

Although the ceramic sample obtained from this excavation is quite large (5,150 fragments), its characteristics does not permit us to know what the specific time when this building was built was; it only gives a general period of the Terminal Classic. For that reason, building materials themselves can provide more information about the possible time of construction of this building. This is because, in most cases, this structure in the form of a "C" was built with reused stones from the area in which Structure N4E4-9 was destroyed, an area that lies directly on a plaza surface that, according to stratigraphic units, also dates from this period (Flores and Shaw 2010; Huerta 2013).

In addition to the walls of Structure N4E4-3, many rocks from Structure N4E4-9 were taken to be used to build the core of the construction. Among these reused stones there are several façade elements, well-cut stones, vault stones, and even *metate* fragments (see Figure 295).

Although it is true that several examples of Postclassic ceramics were found, the quantity was very limited to claim that there was an important occupation in this plaza and in Structure N4E4-3. Besides, most of these fragments belong to Chen Mul Modeled and Navula Unslipped censers (see Chapter 43), ceramics that generally have been associated with ritual activities that occurred in Postclassic times (e.g. Glassman and Anaya 2011: 202-205; Milbrath et al. 2008).

Additionally, we must emphasize that no Postclassic sherds were found within Level 2 of the internal suboperations of Structure N4E4-3, the area that corresponded to the floor associated with the construction of this structure. This means that the Postclassic evidence recovered is later than the construction of this C-shaped structure, and its presence in the area is associated with the series of walls found on the east side of the operation. Although these walls do not have a definite shape in their current condition, these alignments could have been foundations for one or more perishable structures that were placed on the ruins of Structures N4E4-3 and N4E4-9. Contemporary with these wall lines are the shrines that have been located nearby (Figure 270).

Based on this evidence, we argue that this construction dates from the Terminal Classic, but that it belongs to a post-monumental phase, that is, that it was built within that

period but when the structures of larger dimensions were no longer in use or had been abandoned. This phase has already been evidenced by several authors elsewhere in the Maya area (*e.g.* Bey et al. 1997; Barrera et al. 2006; Prem 2003; Ringle et al. 2004;. Tourtellot and Sabloff 1994), though its definition and exact chronology is still being debated.

Another aspect that highlight of the ceramic sample obtained in this excavation is the presence of several examples of ceramic types associated with Xcalumkin region (Johnstone, personal communication, 2014; see Chapter 40).

While there are no artifacts that might give us some indication of what might have been the function of this building, its form may indicate the purpose for this building was created. If this structure was covered, the interior space that would have been generated was approximately 18 x 8 m, an area of 144 sq m. This space itself might have been able to accommodate a large audience, as opposed to the reduced spaces seen in other range structures and pyramidal structures in nearby areas.

For example, at the top of the nearest pyramidal structure, Structure N4E5-3, there is only a limited area of roughly 2.5 sq m, a reduced space that only could house a couple of people at the same time. Unlike the interior of Structure N4E5-3, the space inside the "C", have served to accommodate a large group of people at once, so we suggest that its function is related with a meeting or congregation of several persons.

Equally, the open-front of this construction could also indicate that, even if the interior was roofed, access to the building was not restricted by a wall. Although we paid particular attention to the excavation of the front of this building, no indications of post holes or a palisade, features that would indicate that this building was closed, were located. While certainly more data would be needed to confirm the hypothesis of its function and its open front, it is quite likely that the interior of Structure N4E4-3 had a public character or at least was "more visible" than the range structure that this construction have replaced.

Besides the above-mentioned overall form, the wide bench is an element that also suggests what may have been the building's function. Unlike houses documented for the contact period, which had one or two small bench at its ends (Baños 2009: 12-16), this building has a single and wide bench attached along the walls in the form the "C", which also indicates that it had the capacity to accommodate several people at the same time. Therefore, the bench indicates that several persons attended and/ or participated in certain types of events carried out in the inner space of the construction. It is likely that these meetings were public or semi-public, and perhaps were related to formulating policy or to argumentation or making decisions about the concerns of the people who inhabited this place that seems to have been, during the post-monumental period, at least partially inhabited. Whatever may have been the reason to accommodate several people at the same time in this building, it can be assumed that, because of its position at the center of the square and at the end of the unique causeway of the site, this construction could have been the base or seat of the leaders or authorities of this settlement.

Another aspect that indicates how Structure N4E4-3 was built is the intention that constructors might have had. Although it is early to make a solid statement, it seems that the builders were not very selective in choosing the stones that were used to build the walls and the core fill, since several vault stones, ground stones fragments, and other well-cut stones were used randomly as construction materials in the core of this building.

The destruction of Structure N4E4-9, a range construction prior to Structure N4E4-3, can also have multiple interpretations. One of these would be the builders of the C-shaped structure came from another area and arrived when the site was abandoned, so there was no

intention to preserve the old buildings, since they would have no meaning for them. On the contrary, if the site were inhabited, then perhaps as a symbolic act of imposition, some individuals carried out the destruction of the previous structure (Structure N4E4-9), the former seat of power, to transform it and reuse it for a new ruler or ruling group. An alternative hypothesis is that they were the same people as the ones who destroyed the previous structure and were the same that built Structure N4E4-3, in order to symbolically break with the former seat of the leaders. The construction of an open-fronted structure, without physical restrictions that would have been accessible to more people, perhaps to anyone in the community, may have been the result of a change in policy towards a more inclusive government, unlike the regime that occupied the enclosed spaces of Structure N4E4-9.

A similar example, where a previous building was destroyed to build a C-shaped structure, has been documented in Ek Balam by Ringle, Bey and their crew (Ringle et al. 2004: 501-503). In this case, the researchers propose two interpretations about the presence of this construction. The first of these is that these buildings represent a new power center inhabited by a new elite group, while the second suggests that these buildings are a reflection of a later imposition.

Regardless of what happened with the example of the structure in Ek Balam, it appears that this type of open-fronted building is the result of a long tradition of open-front buildings (Arnauld 2001: 363-366). Such buildings are comparable with "large houses" and open-fronted structures with columns characteristic of earlier times, which were the places where dominant lineages resided (*idem*).

Ethnohistorically, in the Guatemalan Highlands, this kind of building was given the name of *nimja* (big houses), a term that refers both to a "residential building" as to a "noble family" (*ibid*). These constructions were central, large, and public buildings where the men of the community spent one or more nights if rituals or meetings so required (*ibid*: 391). In Yucatan, Bishop de Landa reported similar buildings, which were large and open houses, where young people lived until they married (de Landa 2011: 54).

Although it is true that the shape of these buildings was modified over time, all these buildings had the role of being the buildings where meetings of certain sectors of the community took place, which had a public or semi-public nature.

A contemporary analogy of a building with similar functions would be the *casas ejidales* that exist in the various Yucatec Maya villages. Such spaces have a public character and are owned by the whole community. In these buildings, all issues pertaining to the daily life of the *ejidatarios* of each population are defined and discussed. Although many of these *ejido* houses are enclosed, it is noteworthy that some of these spaces are also open or semi-open, as are the *ejido* houses at Ichmul and Saban, among many other examples in the region (Figure 305).

While still lacking of enough data to decide conclusively what the function of this building was, what is certain is that its location was one of the most important in this settlement. Plaza A is the square that has the most central position within the entire North Group; in addition this architectural assemblage is the largest in size in the whole settlement. Furthermore, this square is the terminus area of Sacbe 1, the only known causeway within the settlement (Figure 306).

Whatever the function of Structure N4E4-9, the fact that it was destroyed to construct Structure N4E4-3, which occurred in a post-monumental phase, implies that there was a major change in this period. Based on observed evidence, we argue that the construction of Structure N4E4-3 represents a change in the form of government for this settlement, from a

centralized government that used more private spaces (Structure N4E4-9) to move to a more participatory government that built more public spaces, such as Structure N4E4-3.

Further studies would still be needed to determine what were the functions of these C-shaped structures in general, and in particular the case of Structure N4E4-3. However, the extensive excavation of this area at the center of San Felipe has allowed us to more deeply explore the occupational history of this settlement, as well as the possible roles and importance that this space, Plaza A, would have had, and the events that occurred during the Terminal Classic period.

Figure 305. Modern *Ejido* Houses

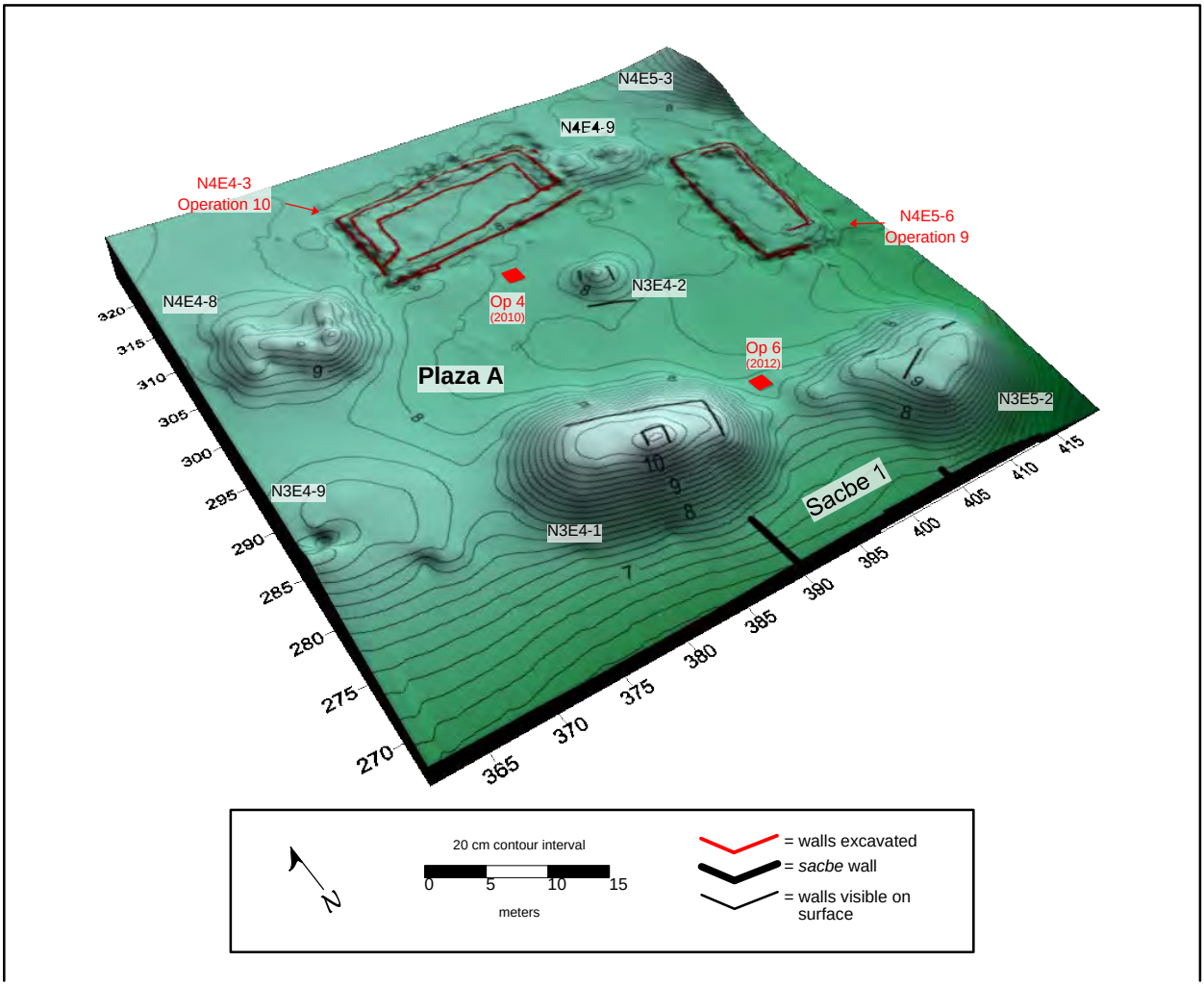


Figure 306. San Felipe, North Group, Topographic Rendering

Part 4: The *Ejido* of San Felipe

Chapter 37: San Felipe, Operation 11

Alejandra Badillo Sánchez

This operation had to be relocated four meters to the southwest of its originally proposed location because of a corn crop that was planted since our last visit to the site (Figure 307). For that reason, Operation 11 was placed west of Structure S1E4-1 (Figures 308 and 309).

The aim of this excavation was to observe the relationship between the structure and the plaza, as well as its relation with the causeway. In addition, data from this unit will be useful to obtain a date for the construction phases of this part of the settlement.

It is noteworthy that the ground surface was prepared for the crop, and for that reason it had been previously burned. Therefore, on the surface of the unit no leaf litter was located. The only vegetation that covered this area were watermelon and squash plants, which were moved outside the unit to minimize its effects (Figure 310).

Operation 11 started with Level 1, Lot 1, which was formed by matrix of very fine textured soil, mixed with ash. Compaction was low and the sediment was black in color (7.5YR 2.5 / 1). On the southeastern side, there was a thick root and a series of stones, irregularly shaped and 20-35 cm long, without any apparent order, which came from the collapse of Structure S1E4-1. These stones were burned by the recent activity of cultivation. This level had a thickness of 2 to 12 cm (Figure 311).

Below the above-mentioned level was Level 2, Lot 1, a soil composed by a dark reddish brown sediment (5 YR 3/2), which was right above bedrock, located at 30 cm in depth (Figure 312).

Once Level 2 was removed, bedrock was exposed in the whole unit. After the excavation and proper registration of the profiles, we continued with the process of backfilling (Figure 313), reintegrating all soil and rocks that were removed from the unit during the excavation (Figure 314).

Interpretation

No surface or subfloor was associated to Structure S1E4-1; however, Level 2, Lot 1 should correspond to the occupational surface related to this construction. This surface was a tamped soil level, and there may not have been a plaza surface in this area or such as surface was very thin, due to the proximity to the bedrock (Figure 315).

With this excavation, it was possible obtain a relative date for the construction of the plaza, which is that of the Terminal Classic, due to the samples of ceramic types including Yokat Striated. var Yokat, Muna Slate and Teabo Red, although there were a few early sherds, such as Chunhinta Black. var Ucú from the Early Formative, as well as Sierra Red and Laguna Verde Incised from the Late Formative, in addition to a few pieces of Tituc Orange Polychrome. var Tituc and Aguila Orange from the Early Classic.

Figure 307. San Felipe, Operation 11 Location

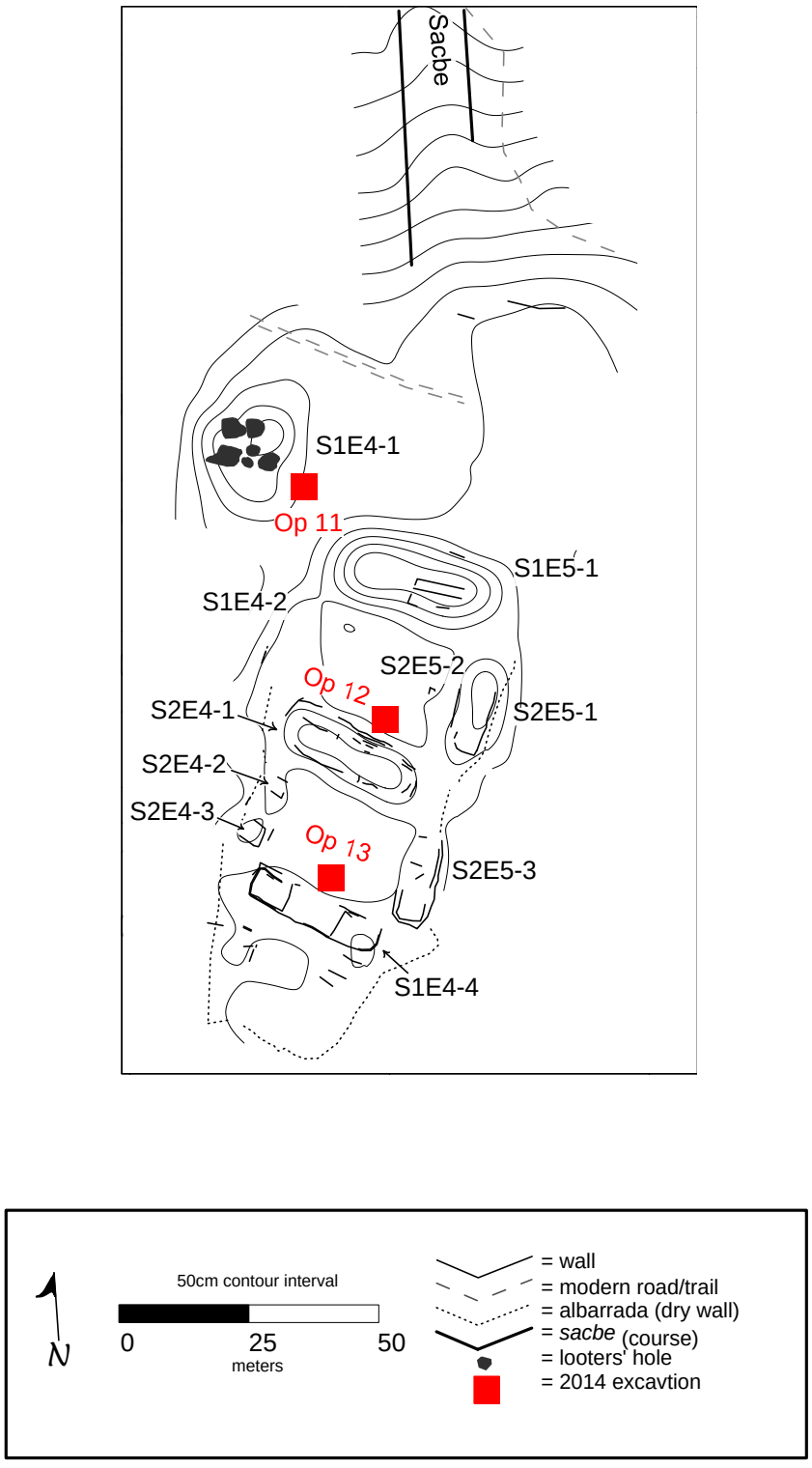


Figure 308. San Felipe, South Group, Location of 2014 Test Pits

Figure 309. San Felipe, Structure S1E4-1 and Operation 11

Figure 310. San Felipe, Operation 11, Surface

Figure 311. San Felipe, Operation 11, Level 1, Lot 1

Figure 312. San Felipe, Operation 11, Level 2, Lot 1

Figure 313. San Felipe, Operation 11, Backfilling Process

Figure 314. San Felipe, Operation 11, Backfilled

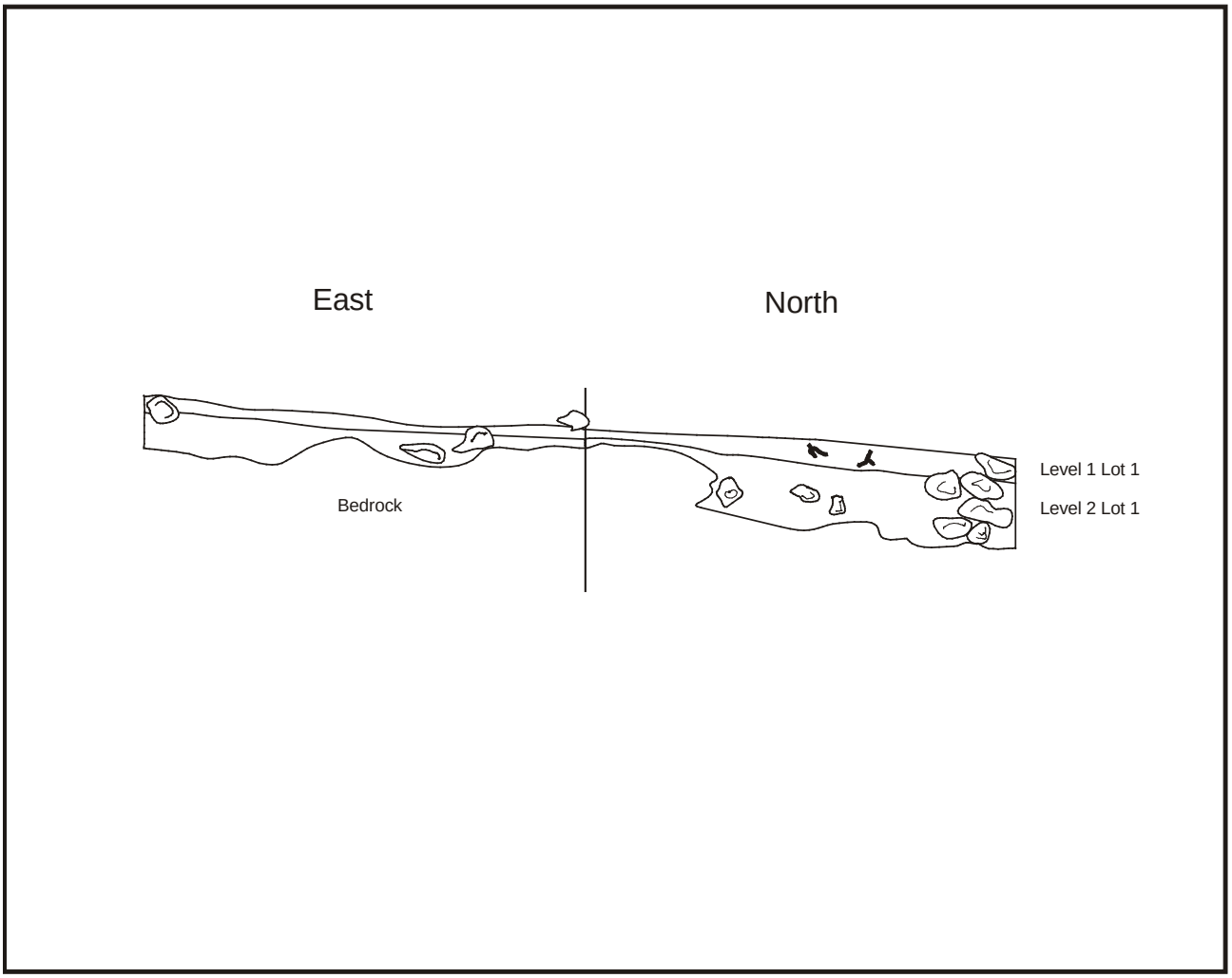


Figure 315. San Felipe, Operation 11, North and East Profiles

Part 4: The Ejido of San Felipe

Chapter 38: San Felipe, Operation 12

Alejandra Badillo

This operation was located north of Structure S2E4-1, right in at the middle of the front of the building (Figure 308). The aim of this excavation was to obtain a date from the plaza and the structure, in addition to identifying the construction system used in this part of the site.

Operation 12 began with the removal of a layer of leaf litter that covered the surface of the land, which corresponded to Level 1, Lot 1 (Figure 316). The first level had a lot of fine roots and only one very thick root. The matrix had a clayey texture, low compaction, and a dark reddish-brown color (5YR 2.5-71). It contained a few 3-2-cm-wide stones, some of them from the collapse of the walls of Structure S2E4-1. This lot had a minimum depth of 8 cm and was 12 cm thick. Among artifacts located in this level were one flint and one limestone flake, in addition to several Yokat Striated. Var. Yokat sherds from the Terminal Classic period (Figure 317).

Below Level 1, Lot 1, two other lots corresponding to Level 2 were located. Level 2, Lot 1 was a cultural layer formed by an alignment of well-faced stones, which were 25 to 30 cm high, mixed with a dark reddish brown soil (5 YR 3/3). The area in front of this alignment was designated as Level 1, Lot 2, and was formed by the same soil as the previous level but mixed with rough rocks of 10-40 cm in size with no apparent order, suggesting that they came from the collapse of Structure S2E4-1. Ceramics from Level 2, Lot 2 were Yokat Striated var. Yokat, Muna Slate and Sacalum Black on Slate from the Terminal Classic (Figure 318).

After removing the stones from the collapse of Level 3 Lot 1, a 2-11-cm-thick gravel surface was located. This layer was of medium compaction, and contained a clayey soil of a dark reddish brown color (2.5YR 2.5 / 4) (Figure 319). This level also included large rough rocks, of 30 to 40 cm in width, with no apparent order, though several were concentrated in the northwest side.

It is likely that these rocks were part of the construction fill of the plaza that was found a few meters below, Level 3, Lot 2. This surface was a cultural deposit, formed of a dark red soil (2.5YR 3/6) with rocks of 10 to 55 cm wide. This layer had a thickness of 30-37 cm. In Level 3, several Early Formative ceramic samples were collected, as well as samples of Chunhinta Black: variety Ucu, ceramics from the Late Classic including Encanto Striated, and Teabo Red from the Terminal Classic, in addition to a flint striker (Figure 320).

Below the rocks of the fill, a silty-loam layer of soil was found (Level 4, Lot 1). This layer had a high compaction and was of a reddish brown color (2.5YR 4/4); it included some rocks of 40 to 80 cm long and other small stones that were used to level the terrain. These rocks had a light gray color (10YR 7/1). This layer had an average thickness of 37 cm.

Underneath this deposit, bedrock was exposed in the whole unit (Figure 321). Bedrock was located at a minimum of 47 cm deep from the surface and up to 1.17 m in depth (Figure 322).

Figure 316. San Felipe, Operation 12, Surface

Figure 317. San Felipe, Operation 12, Level 1, Lot 1

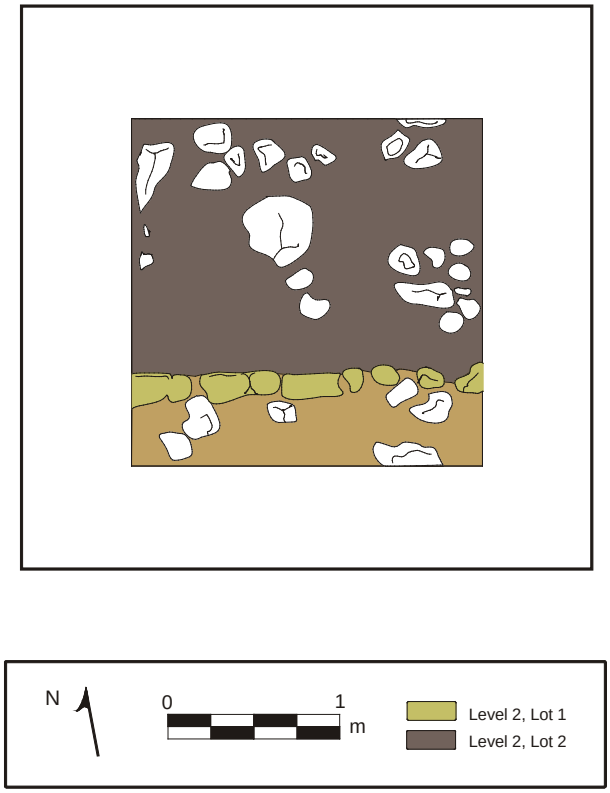


Figure 318. San Felipe, Operation 12, Level 2, Lots 1 and 2

Figure 319. San Felipe, Operation 12, Level 3, Lot 1

Figure 320. San Felipe, Operation 12, Level 3, Lot 2

Figure 321. San Felipe, Operation 12, Level 4, Lot 1

Figure 322. San Felipe, Operation 12, Bedrock

The architectural feature located in Level 2, Lot 1 was consolidated with a mixture of lime and *sascab*, and later painted with brown soil. The aim of this consolidation was to prevent future alterations, and with this ensure its preservation after our intervention (Figure 323).

After the excavation, the test pit was backfilled with all of the soil and stones extracted from the excavation. The alignment of stones was carefully covered with a layer of soil to prevent any damage (Figures 324 and 325).

Interpretation

The south side of the plaza began to be built during the Terminal Classic period, when a layer of rocks, gravel and soil was placed to create a surface.

All this material made up construction fill, which can be dated to the Terminal Classic. Over this was a gravel subfloor that was poorly preserved. For that reason, none of the surface of the floor could be documented (Figure 326). This stage corresponds to the occupation surface of Structure S2E4-1. Thanks to this excavation, it is possible to define that this zone was occupied between about A.D. 600 and 1000.

Figure 323. San Felipe, Operation 12, Consolidation

Figure 324. San Felipe, Operation 12, Backfilling

Figure 325. San Felipe, Operation 12, Backfilled

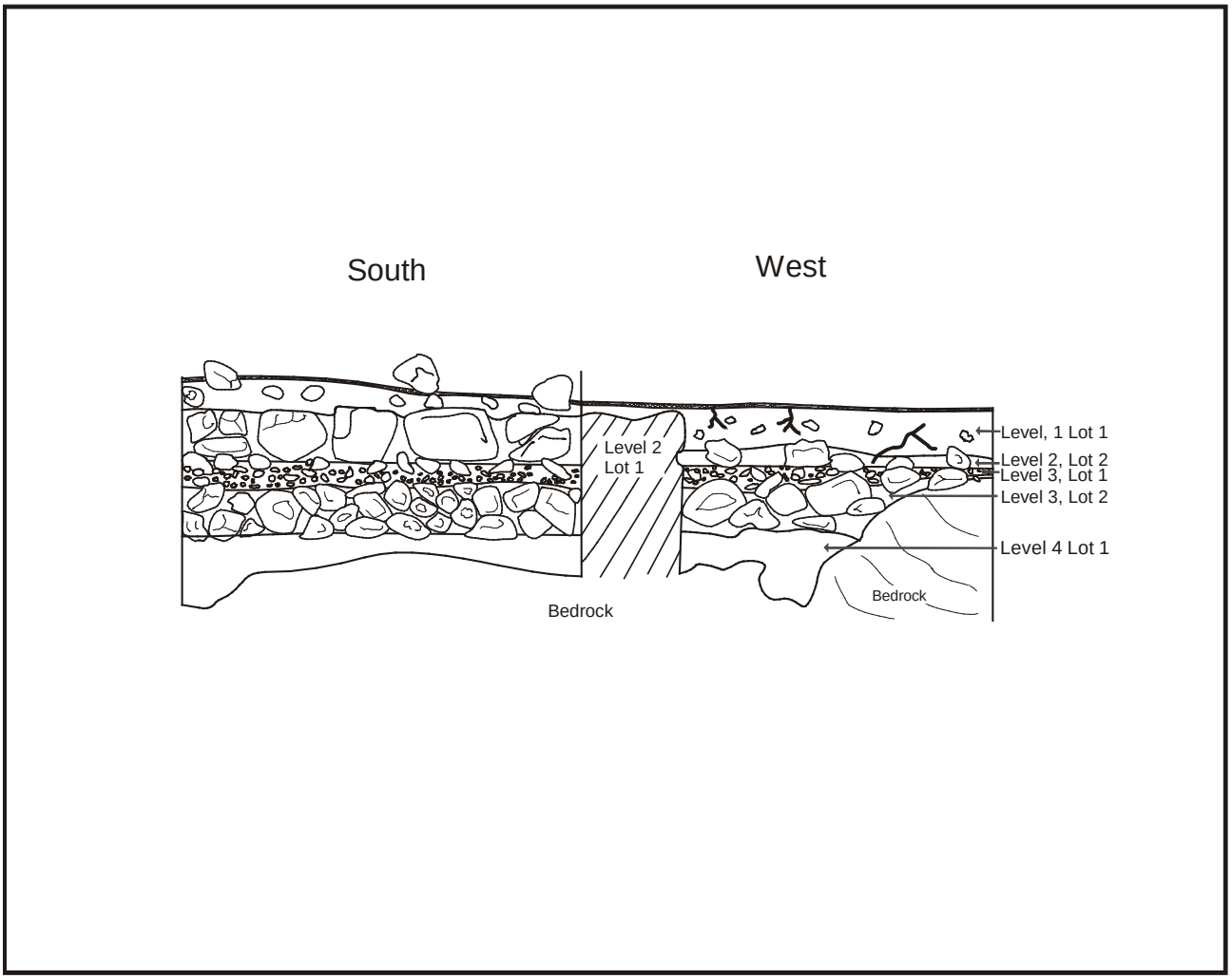


Figure 326. San Felipe, Operation 12, South and West Profiles

Part 4: The *Ejido* of San Felipe

Chapter 39: San Felipe, Operation 13

Alejandra Badillo

San Felipe's Structure S1E4-4 has a square plan, approximately 10 m long in its east-west axis. It was made by a stone course that is 25 to 40 cm wide. At the center of its frontal area, there is a projection of rocks (Figure 327). A 2 x 2 m test pit was placed directly to the west of these rocks (Figure 308), with the aim of obtaining a relative date through ceramic analysis, as well as defining the construction episodes of the building.

On the surface there was a layer of litter leaf that was removed to start the excavation of Level 1, Lot 1 (Figure 328). This level was composed of a clayey sediment of low compaction, with a dusky red (10R 3/3) color, abundant fine roots, and several pieces of gravel. This level was from 3 up to 32 cm in depth (Figure 329).

Below the next level (Level 2, Lot 1), several irregular stones (5 to 35 cm in size) were observed, mixed with a reddish brown (2.5YR 4/3) clayey sediment of medium compaction. This level had an average thickness of 20 to 25 cm (Figure 330). After that, several larger stones between 30 and 45 cm in size were observed. Some of these rocks were well-cut and were placed without apparent order. Following this, Level 2, Lot 2, was discovered as a color dark reddish brown (2.5YR 3/4) loamy sediment, which had a thickness of 12-18 cm (Figure 331).

Subsequently, a cultural layer (Layer 3, Lot 1) was found, which included a two-course wall, constructed with well-cut stones (of 30 by 35 cm wide and 13 by 30 cm long). Together these formed a wall of 50-to-58 cm high. In between the junctions of the rocks, a red (2.5YR 4/8) sediment was present (Figure 332).

In front of this architectural element, Level 3, Lot 2 was found, which corresponded to a clayey red sediment (2.5YR 4/6). This level had a medium compaction and consisted of a subfloor made with gravel of 2 to 3 cm thick, located throughout the excavation area. Only a portion of its polished surface was observed, right in front of the architectural element, in an area of 2 x 90 cm. This area was named Level 3 Lot 3; it had a fine texture, very high compaction, with a thickness of 9-to-10 cm. Within this layer several samples of Arena Red sherds from the Terminal Classic were found (Figure 333).

As the excavation continued, under the subfloor, a plaster floor (Floor 1, Level 4, Lot 1) was discovered. This floor had a fine texture, medium-to-high compaction and a very pale brown color (10YR 8.5/2). In total, it had a thickness of 4-5 cm, but this floor was not located in the whole unit (as was the case of Level 3, Lot 3). Ceramic samples recovered from this level were from the type Yokat Estriated var. Yokat (Figure 334).

Below this floor an incomplete subfloor of gravel (Level 4, Lot 2) was located. However, this time the floor was observed across the whole extent of the excavation unit. It was composed of several 1-to-15-cm-wide stones, mixed with a reddish yellow sediment (5 YR 6/6). In total, this layer was 5 to 13 cm thick (Figure 335).

Figure 327. San Felipe, Structure S1E4-4

Figure 328. San Felipe, Operation 13, Surface

Figure 329. San Felipe, Operation 13, Level 1, Lot 1

Figure 330. San Felipe, Operation 13, Level 2, Lot 1

Figure 331. San Felipe, Operation 13, Level 2, Lot 2

Figure 332. San Felipe, Operation 13, Level 3, Lots 1-3

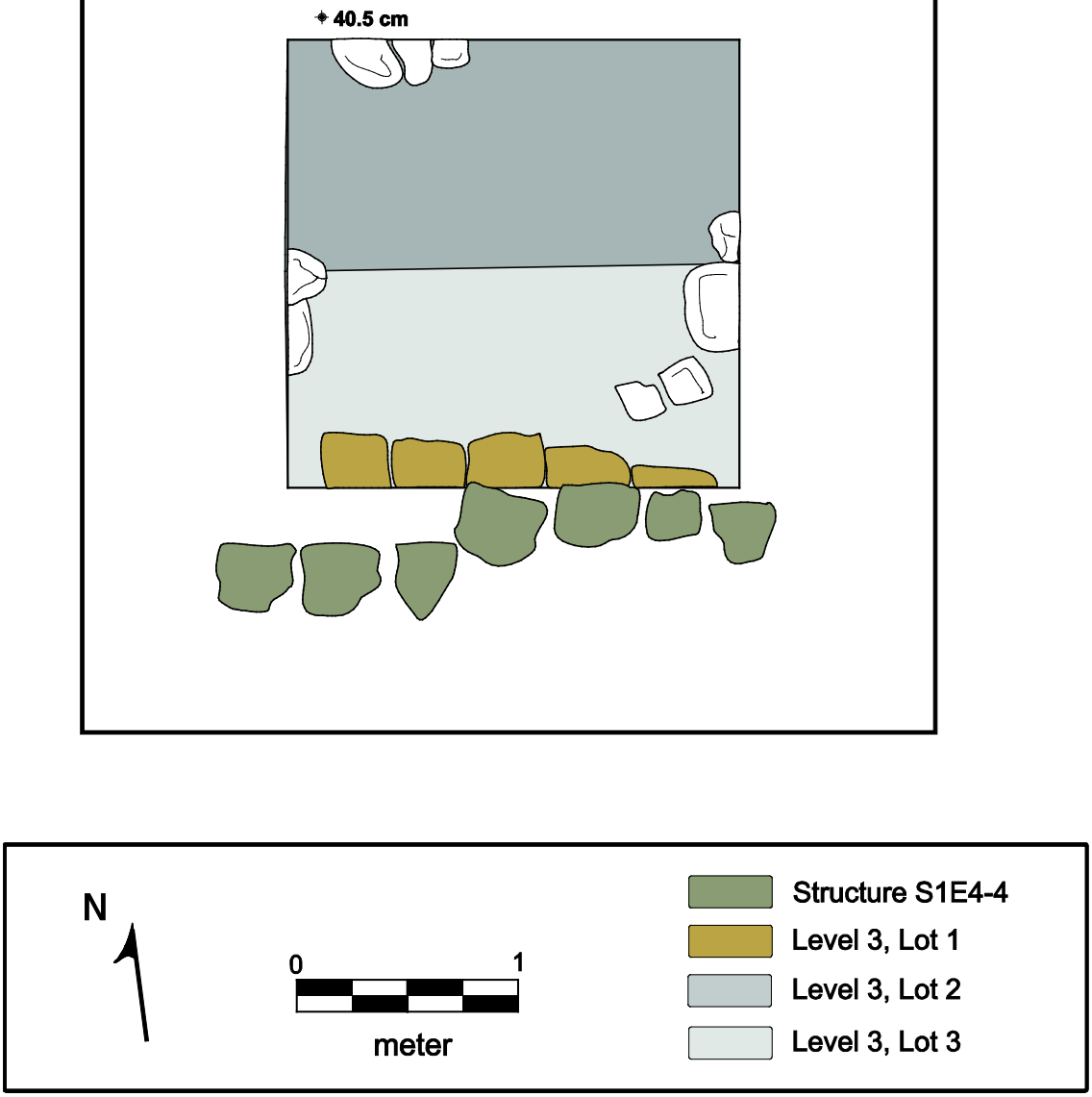


Figure 333. San Felipe, Operation 13, Level 3, Lots 1-3, Plan

Figure 334. San Felipe, Operation 13, Level 4, Lot 1

Figure 335. San Felipe, Operation 13, Level 4, Lot 2

After removing the gravel a second stucco floor was discovered (Level 5, Lot 1), which also did not cover the full extent of the unit. It had a high compaction, a light brown color (7.5 YR 6/3) and was 5 to 6 cm thick. This floor was placed over a gravel subfloor (Level 5, Lot 2), which was located just below Level 5, Lot 1. This subfloor was 6 to 7 cm thick, and was mixed with a light brown clayey soil. (7.5YR 6/4). In total this layer had a thickness of 9 to 10 cm (Figure 336).

After this level, Level 6, Lot 1 was located in the full extent of the unit. This layer had a medium compaction, a dark red color (10R 3/6), and was 7 cm thick. It was composed of gravel stones and soil, which had several red pale spots (10R 4/4) in a random distribution (Figure 337).

These red pale color spots (10R 4/4) continued in the next lot (Level 6 Lot 2), however the soil matrix changed to a red color (2.5YR 4/8), also having a high degree of compaction. In this layer, several irregular stones were found. In total, this level was 30 to 42 cm thick. It is noteworthy that it contained several ceramic sherds from Late Formative, including the types of Chancenote Unslipped, Sierra Red, Laguna Verde Incised and Polvero Black (Figure 338).

Level 6, Lot 3, had a clayey composition, a very high compaction, and was the same color as the previous lot. It contained several pieces of gravel and in total had a thickness of 12-20 cm. Similarly, this level had ceramics samples from the Early Formative period, including examples of Tumben Incised, as well as from Late Formative (Sierra Red) in addition to many others from Terminal Classic, as well as fragments of Muna Slate and Teabo Red, among others (Figure 339).

Finally another change in the composition of the soil was detected. This corresponded to the Level 7, Lot 1, which was a very compact loamy sediment, with a red color (10R 4/8), and with the same above-mentioned pale red spots (10R 5/4). In total, it was from 11-55 cm thick. Within this lot, a piece of flint was collected, plus several fragments of ceramics that were not identified (Figure 340). Within this level, an area of 30 cm in diameter was located. This layer was named as Level 7, Lot 2, and was 36 cm deep, of a fine texture, low compaction, and a red pale color (10R 5/4).

These two lots were the last layers before the discovery of the bedrock, at 2.12 m in depth from the surface (Figures 341 and 342).

The wall located in this unit was consolidated in order to preserve and ensure its preservation for future excavations (Figure 343). After completing the excavation, all the soil and stones extracted were used to backfill the unit, using a fine layer of sediment to protect the wall (Figures 344 and 345).

Figure 336. San Felipe, Operation 13, Level 5, Lot 1

Figure 337. San Felipe, Operation 13, Level 6, Lot 1

Figure 338. San Felipe, Operation 13, Level 6, Lot 2

Figure 339. San Felipe, Operation 13, Level 6, Lot 3

Figure 340. San Felipe, Operation 13, Level 7, Lots 1 and 2

Figure 341. San Felipe, Operation 13, West Profile

Figure 342. San Felipe, Operation 13, Bedrock

Figure 343. San Felipe, Operation 13, Consolidation

Figure 344. San Felipe, Operation 13, Backfilling

Figure 345. San Felipe, Operation 13, Backfilled

Interpretation

Structure S1E4-4 is a 10-m-long rectangular platform, with a protruding access (25 cm north) at the middle of its frontal side. It is probable that this platform was the base of a perishable structure that once was constructed on its surface.

In this unit a substructure of the above-mentioned construction was located, between 20 and 25 cm depth, with the same east-west orientation. However, this substructure had no indication of an access (at least not in the area of the excavation unit) suggesting that it had different dimensions than the structure, *i.e.* that this substructure perhaps was larger than Structure S1E4-4, or it might indicate that the main entrance was not facing north. This could be defined only through other excavations at this area of the site.

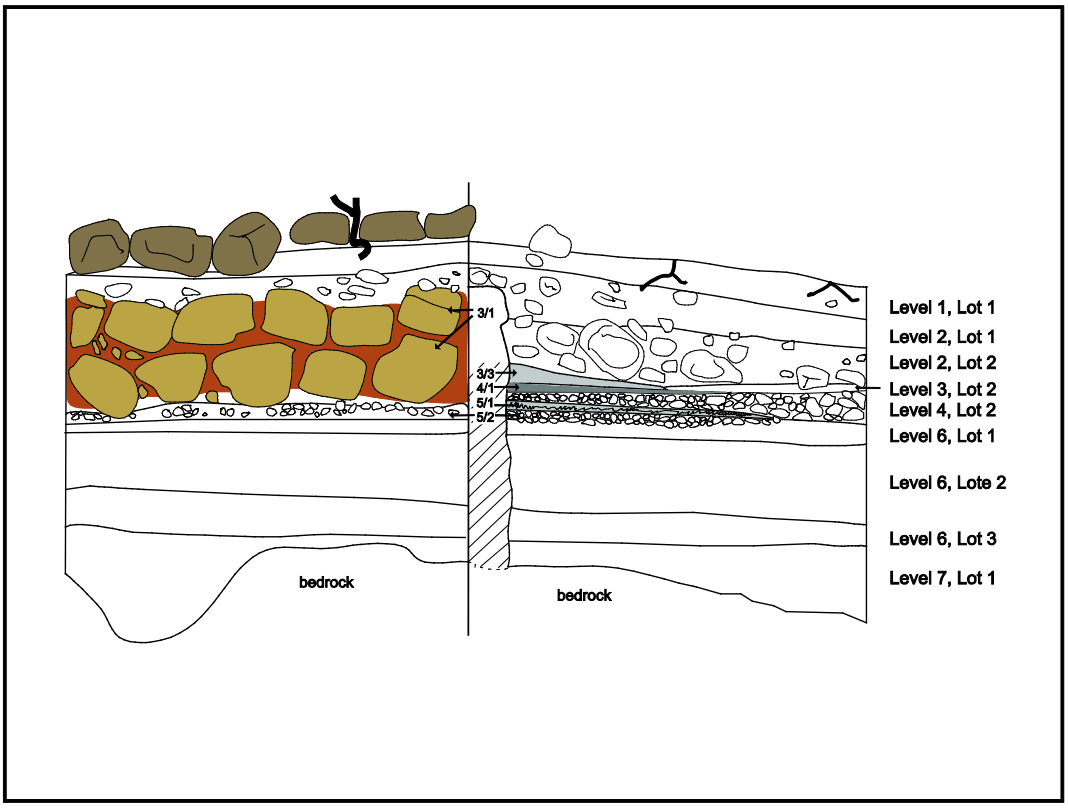
As a result of this 2014 season, it was possible to define that the substructure was built before A.D. 800. For this, the terrain was leveled with a layer of soil above the bedrock. On this layer, the substructure was constructed with well-cut stones arranged in two rows that reach a height of about 58 cm (Figure 346).

Associated with this architectural feature, three occupational surfaces were detected. The first occupation consisted of a stucco floor and a subfloor of gravel dating from the Early Classic period, which was in use until during the Late and Terminal Classic, when another plaster floor was laid on a subfloor of gravel, using the previous floor as a foundation. Finally another thick stucco surface was made, which dates from the Terminal Classic period (Figure 347).

It is noteworthy that none of the floors or stucco surfaces were complete in the whole unit, but the gravel surfaces hinted the existence of the floor in the whole area. The poor preservation of the floor could be the result from exposure to the environment, since there's no indication of this floors were intentionally broken; the lack of the surface points out to an erosional process. Later, after A.D. 800, the substructure was in disuse and Structure S1E4-4 was built, at some point in between A.D. 800 to 1000.

With the differences shown in the construction in this area of the archaeological site, with respect to the occupation surfaces, it can be argued that the socio-political circumstances varied between the Early Classic to Terminal Classic; these were reflected in the architectural work. This issue could be caused by the lack of economic resources or any vicissitude in the availability of labor or materials for construction.

With the data from this 2014 season, and the information from future seasons, it might be possible to fully unravel the social processes that formerly occurred in this area of the settlement, in order to learn more about the history of this important town in the Cochuah region.



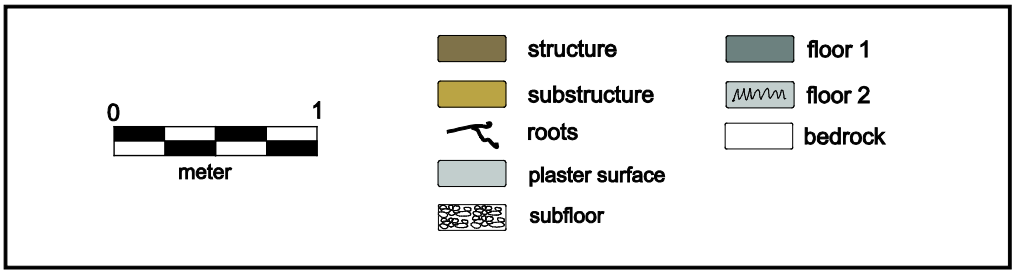


Figure 346. San Felipe, Operation 13, South and West Profiles

Figure 347. San Felipe, Operation 13, Plaster Floors

Part 5: Summary and Analysis

Chapter 40. Ceramic Results from the 2014 Field Season

Dave Johnstone

Unlike previous field seasons where the research goals included a focus on ceramics, this season saw ceramics in service to other areas of research related to dating of sites, construction phases, or to the activities performed at certain localities. A total of 19,188 sherds and two reconstructable vessels were recovered from 37 Operations at 10 sites. This sample is the largest recovered to date by the CRAS project, and while a large portion of the sample was from structures dating to the Terminal Classic, complexes dating to the Early Classic and Postclassic were also definable at a few sites. All ceramics were analyzed using the Type-Variety method (Smith et al. 1960) (Tables 1-10).

Parcela Escolar

The two Operations from Parcela Escolar were focused on round foundation braces. These yielded relatively small samples dating to the Terminal Classic. Additionally, a sample of Early Classic ceramics from Structure N8E1-1 sub 1 combined with sherds admixed in later deposits permitted the establishment of the Toh ceramic complex. While this complex is similar to other sites in the region in terms of types represented, the relative frequency of Yaxcaba Striated is higher than at other sites.

Sacalaca

The ceramic sample from the single excavation at Sacalaca was surprisingly large, given the few ceramics recovered from the principle focus of excavation, Structure N5 E6-1. The mix of Middle and Late Formative material incorporated within the fill of the main platform will help to bolster the samples recovered from previous seasons (Johnstone 2003) when it comes to comparing this site with others in the region. In particular, it allows the placement of the Late Formative Ch'com complex within the Chicanel ceramic sphere on the basis of a heavy preponderance of ceramics from the Sierra group.

Xbaquil

The two test pits at Xbaquil were intended to recover a ceramic sample that would permit the establishment of a ceramic chronology for the site. However, the small sample recovered, and the poor condition of ceramic preservation did not permit this goal to be met. While the majority of those sherds that could be identified dated to the Terminal Classic Period, no ceramic complex could be defined given the small sample recovered.

San Diego

As at Xbaquil, the two excavations at San Diego were intended to recover a large ceramic sample that would permit the dating of the occupational periods of the site, and permit a comparison of San Diego's ceramic assemblage with other sites. However, the sample recovered was extremely small, and was poorly preserved. The majority of the sherds identified dated to the Terminal Classic Period, but their numbers did not permit the establishment of a ceramic complex.

Gruta de Alux

The test pits from Gruta de Alux excavated near two round foundation braces in 2010 hinted at a Terminal Classic date for these structures, but did not yield a large enough sample to reach a definitive conclusion. The sample from 2014 also yielded Terminal Classic sherds directly associated with a round structure, and in numbers that, when combined with the sample from 2010, permit the establishment of a ceramic complex for the Terminal Classic at Gruta de Alux. The Maaz complex can be included in the Western Cehpech ceramic sphere on typological grounds. Interestingly, both the 2010 samples and the sample from this season showed a much higher frequency of Yokat Striated than is typical for sites in the region. This might indicate a distinct function for these structures. However, I suspect that this is a biproduct of the extremely poor preservation of the ceramics from this site. In both seasons, the number of identified sherds was much lower than the number of unidentified sherds. This is usually the result of thermal or chemical weathering which removes the slip from many sherds; rendering them unidentifiable. Unslipped types such as Yokat striated are not affected to the same degree as the slipped types, as identification is not dependent of the presence of a slip. As a result, Yokat may be overrepresented in the collection due to its ease of identification with respect to slipped types.

San Francisco

San Francisco was ceramically the most surprising site of the season. While I expected the site to produce a good sample from the Terminal Classic, I did not expect as large a sample as was recovered. The Payooch complex can be included in the Western Cehpech ceramic sphere on the basis of the presence of Chum group types. Of interest is the high relative frequency of Teabo Red within the sample. Unexpectedly, San Francisco also produced a large enough sample from the Early Classic to define a ceramic complex for that period: the Chab complex. This complex can be included within the Xculul ceramic sphere on the basis of the relative importance of Flaky Redware.

Fortín de Yo'okop

While the ceramics from this year's excavations did not permit the establishment of any new ceramic complexes for the site of Fortín de Yo'okop, they did clarify those present. The 2012 sample from Fortín de Yo'okop showed a rather large percentage of imported trade ware from the Petén during the Early Classic (Johnstone 2012:297). A comparably sized sample from this season did not display such high relative frequencies, though both Balanza Black and Dos Arroyos Polychrome were more frequent than the tradeware from Northern Yucatan, Tituc Orange Polychrome. This
illustrates the importance of large samples when characterizing a ceramic assemblage. Another biasing factor is seen with the high relative frequency of Chum Unslipped in the 2012 sample. The vast majority of this type was recovered from a single level of the same

Operation, and may result from the *in situ* breakage of a single vessel. An even larger sample from 2014 only recovered a single sherd of this type.

Yo'okop

While the initial ceramic chronology has been summarized elsewhere (Johnstone 2005), the additional sample from this season helps to clarify the initial ceramic picture from Yo'okop. A twenty percent increase in the sample in the Middle Formative Itzamna complex has added a few new types consistent with its placement within the Komchen ceramic sphere. The majority of the ceramics recovered from Yo'okop this season date to the Early Classic. This is nearly double the size of the entire sample of the Ixchel complex recovered to date. As such, it continues to show the importance of imported polychrome tradewares. One difference of note is the high relative frequency of Yaxcaba Striated in the sample in comparison to that recovered in previous seasons. This underscores the need to be cautious when it comes to interpreting small ceramic samples as they may be unrepresentative of the site at large.

Venadito

During the mapping of Venadito, architectural elements allowed for the establishment of occupational phases for the Terminal Classic and Postclassic periods. The ceramic sample from this season confirmed this observation, suggesting that Venadito had been established as a green field site during the Terminal Classic. The sample from that period was large enough to establish a complex, the Muuch, which can be included in the Western Cephech ceramic sphere. Additionally, the placement of the test pits at the foot of structures that supported Postclassic shrines meant that large numbers fragments of Chen Mul incense burners (see Chapter 42) were also recovered. Of note is the relatively low frequency of unidentified sherds which is likely the product of the central portion of the site not being subjected to periodic burning.

San Felipe

As San Felipe was the focus of half of the project's resources for the 2014 season, it is not surprising that half of the sherds recovered this season come from this site. The focus on late structures meant that the ceramics recovered were commensurately late; primarily dating to the Terminal Classic, with a bit of Postclassic overlying the structures. The San Felipe assemblage from open-fronted architecture context shows a few types common to Chichén Itza but in low frequency (1.5 percent). A similar context from Nohcacab (Johnstone 2004b) also showed a small amount of types common at Chichén Itza, but a slightly higher relative frequency. These types have a very restricted context at San Felipe, with no examples recovered from 11 other locations sampled at the site. Thus, the main difference ceramically between Florescent and Post-Florescent contexts at San Felipe is the addition of a few types common to Chichén Itza, as well as the addition of Holactun Black on Cream from the

region around Xcalumkin. The few Postclassic sherds recovered did not constitute a functionally complete assemblage, and consisted mainly of *incensarios*.

Regional Summary

The few sites yielding Middle Formative sherds this season and the small numbers of sherds from this period should not be regarded as an indication of the infrequent distribution of sites dating to this period. Rather, the nature of our focus on late period and greenfield sites dating to the Terminal Classic of necessity limit our sample from this period. We knew from previous seasons that this period is represented at both Yo'okop and Sacalaca (Figure 348). In both cases, these sherds are not in primary context, but were incorporated into later construction as fill. The small sample of sherds recovered from San Francisco was unexpected, and suggests that further excavation of this site might yield a sample large enough to define a Middle Formative complex in the future.

The Late Formative (Figure 349) was also poorly represented in this season's sample for much the same reasons as limited the Middle Formative. Nevertheless, adding to our sample from Sacalaca helped to include that site in the Chicanel ceramic sphere. The modest sample recovered from San Francisco suggests that while we did not encounter construction episodes dating to this period there, it is likely that such constructions do exist elsewhere at the site.

Noteworthy Early Classic samples from Parcela Escolar and San Francisco permitted the establishment of ceramic complexes for this period from both sites (Figures 350 and 351). At the former site, this was associated with contemporaneous construction, while at the latter site, the Early Classic material was in tertiary context, admixed with later construction. In both cases, the relative frequency of Yaxcaba Striated was higher than average for the region. It is too early to speculate as to the cause of this apparent discrepancy though.

The Late Classic period continues to be a problematic period within the CRAS region. While most of the sites tests this season show traces of Late Classic types, none have sufficient numbers to permit the establishment of a ceramic complex for this period. This situation has been noted previously (Johnstone 2012:298), suggesting that this is not a sampling issue, and that this period really is poorly represented across the region.

With the documentation of numerous sites within the Cochuah region that contain constructions dating to a late occupation following the Classic collapse, we are forced to consider the possibility that ceramically, the Terminal Classic (Figure 352) continued much later than the A.D. 1000 end date for the Cehpech complex proposed by Smith (1971:173). The addition of Chichen Slateware and other types commonly found at or near Chichén Itza (Figures 353 and 354) or beyond within the study area only after the collapse suggests that there is a change in the nature of the distribution of ceramics after this event. Prior to this, exchange involving these types was rare to non-existent within the Cochuah region.

While some new Postclassic types were identified this season (Figure 355), ceramically the Postclassic continues to be specialized sub-complex rather that a functionally complete complex (Figure 356). This sub-complex is related with rituals tied to shrines and their associated plaza altars at sites like San Francisco, Venadito and San Felipe. This is frustrating in that it implies a nearby resident population, which to date has eluded discovery.

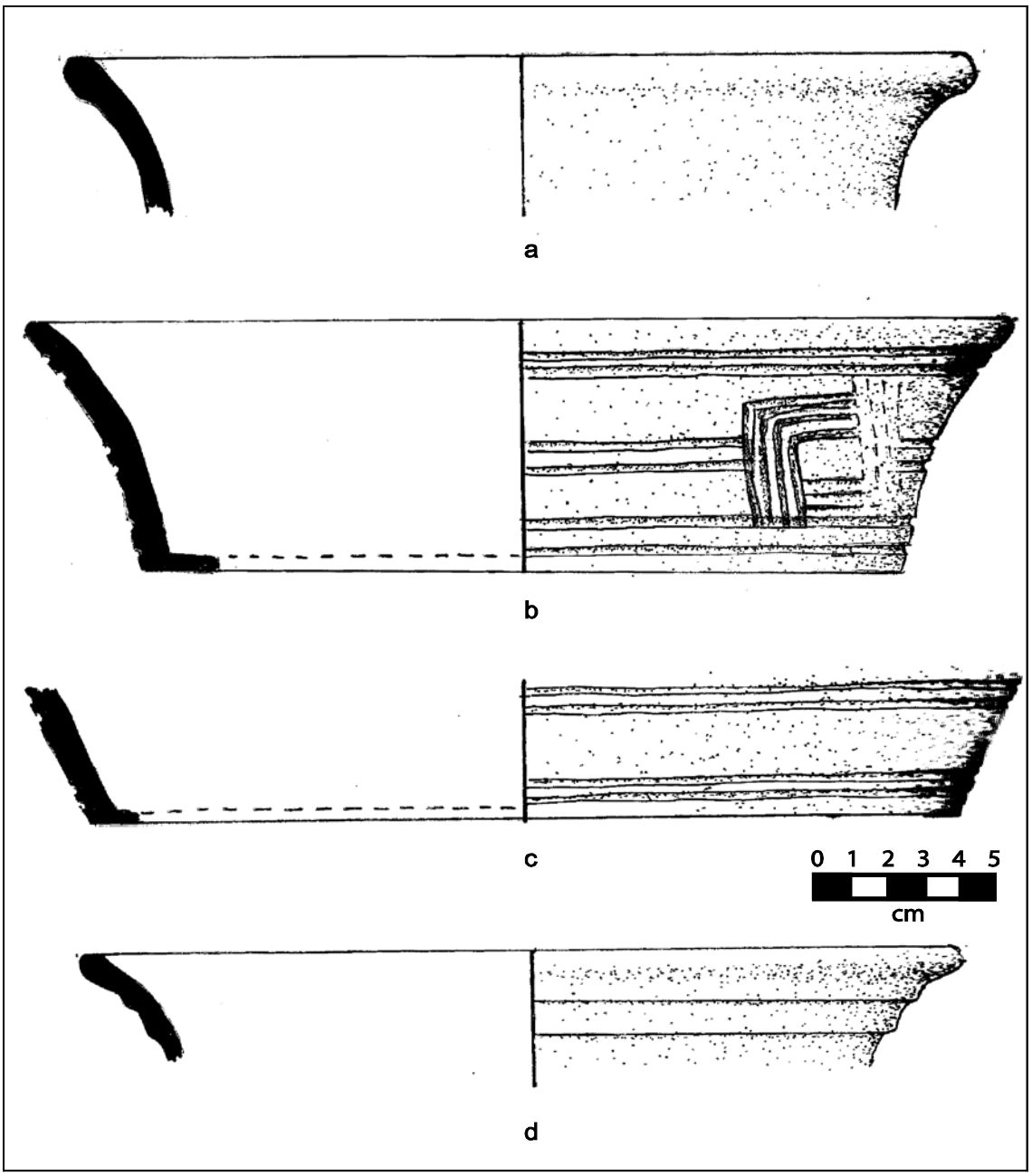


Figure 348. Middle Formative Ceramics, a) Dzudzuquil Cream-to-Buff (Sacalca), b) Petjal Red-on-Black and Cream (Yo'okop), c) Nacolal Incised (Yo'okop), and d) Desvario Chamfered (Yo'okop)

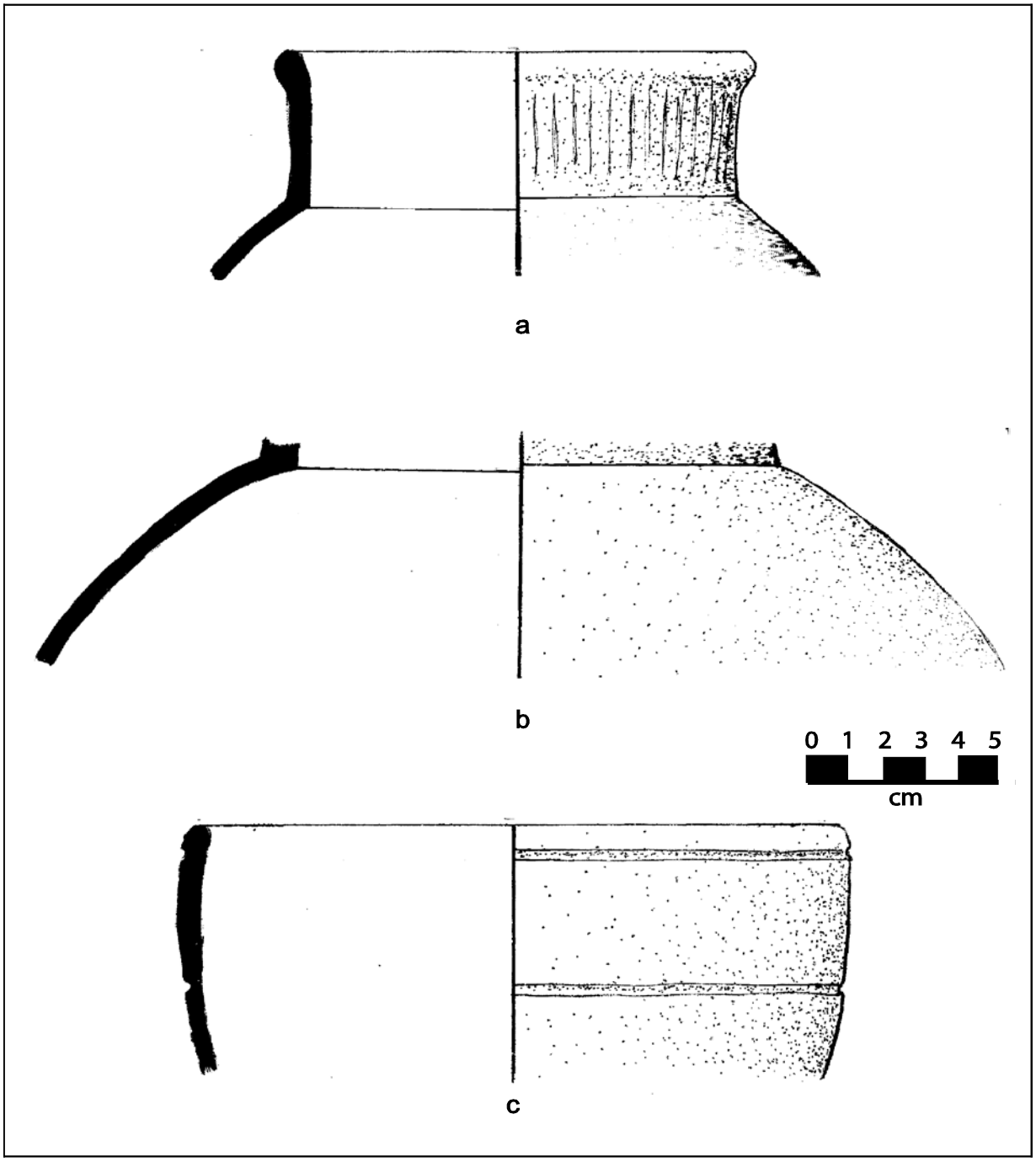


Figure 349. Late Formative Ceramics, a) Dzalpach Composite (Fortín de Yo'okop), b) Sierra Red (Sacalaca), and c) Laguna Verde (Sacalaca)

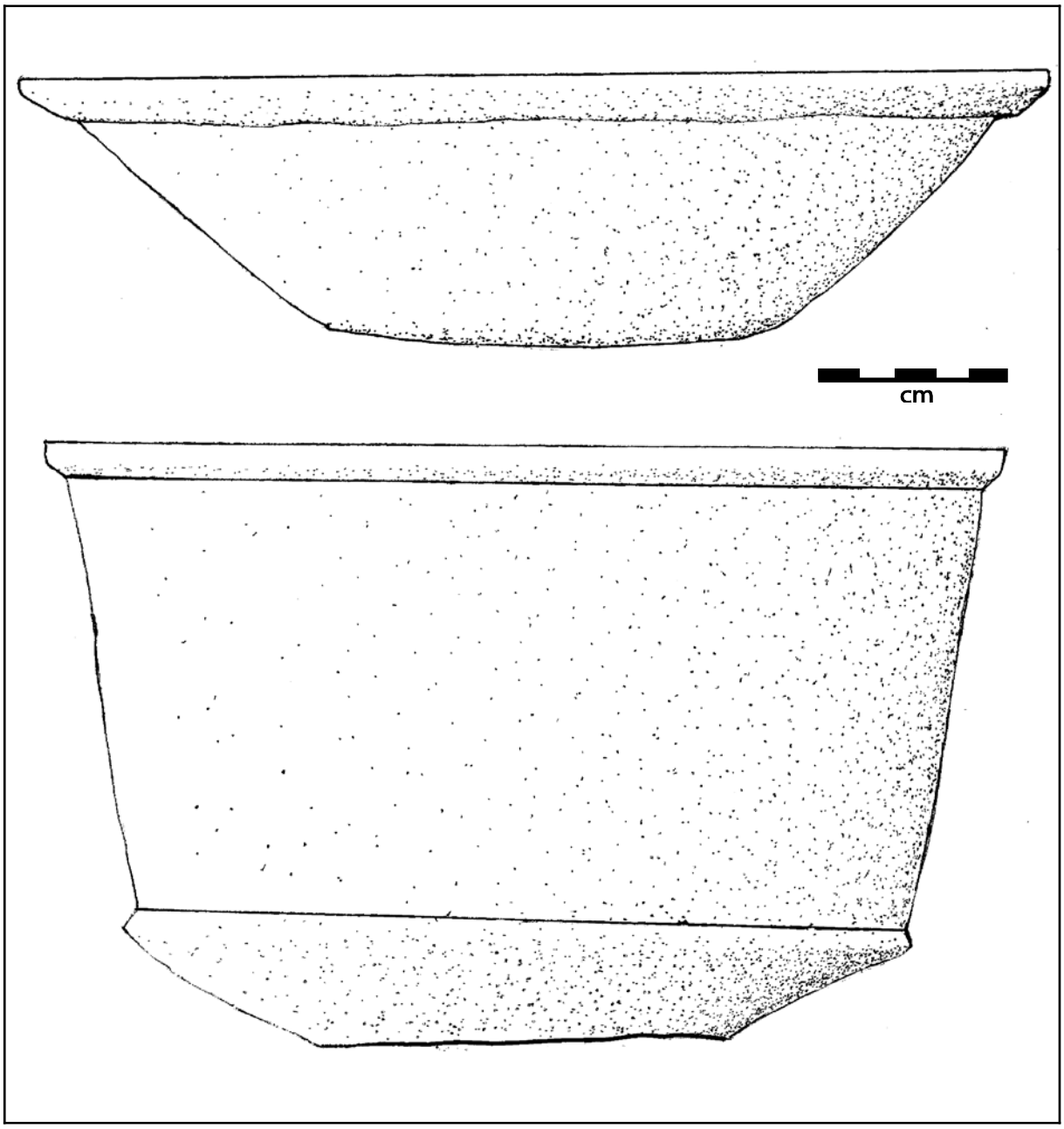


Figure 350. Early Classic Ceramics. Xanaba Red (Parcela Escolar Cache 1)

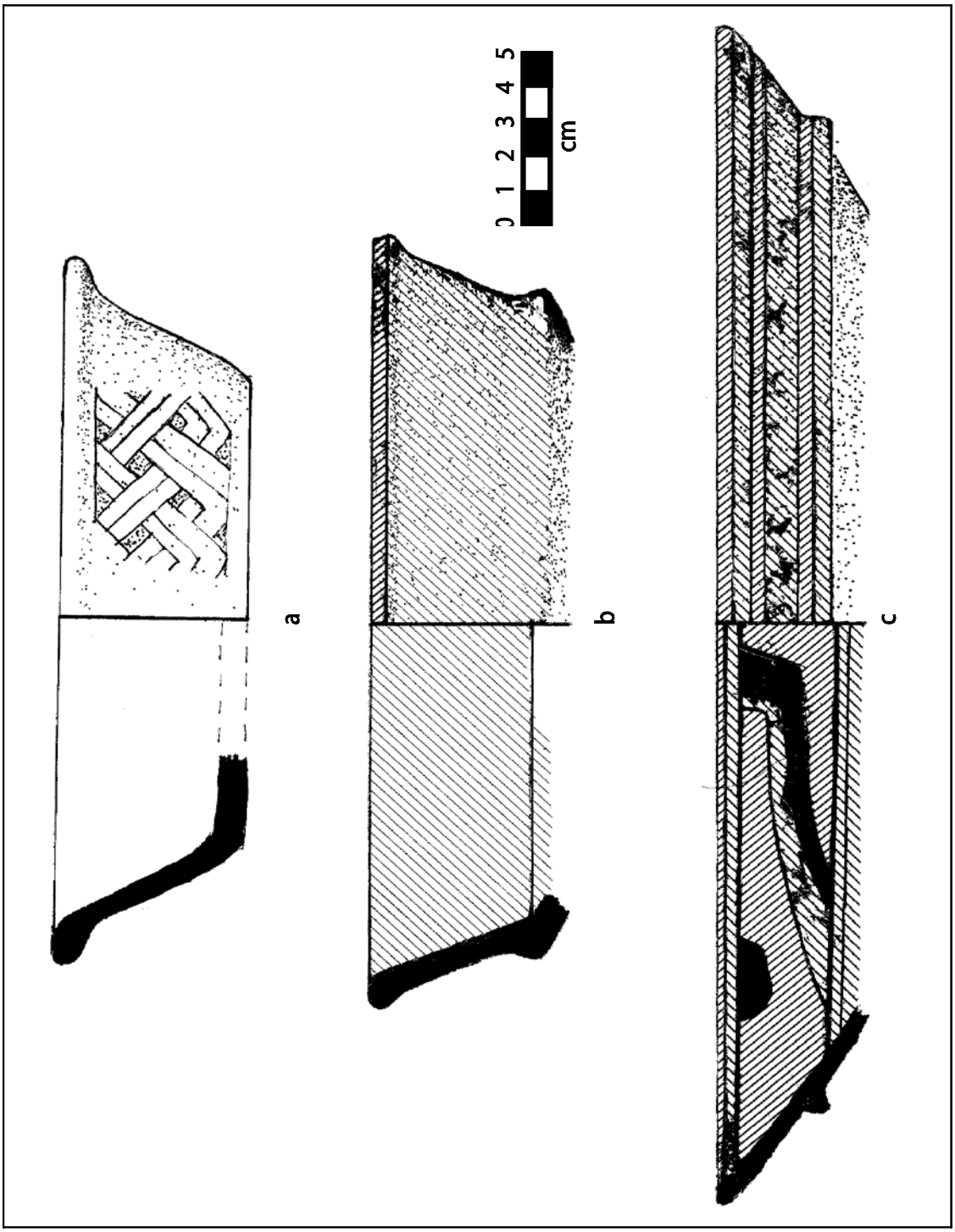


Figure 351. Early Classic Ceramics, a) Huachinango Incised Bichrome (San Felipe), b) San Blas Red-on-Orange (Parcela Escolar), and c) Tituc Orange Polychrome var. Camichin (Yo'okop)

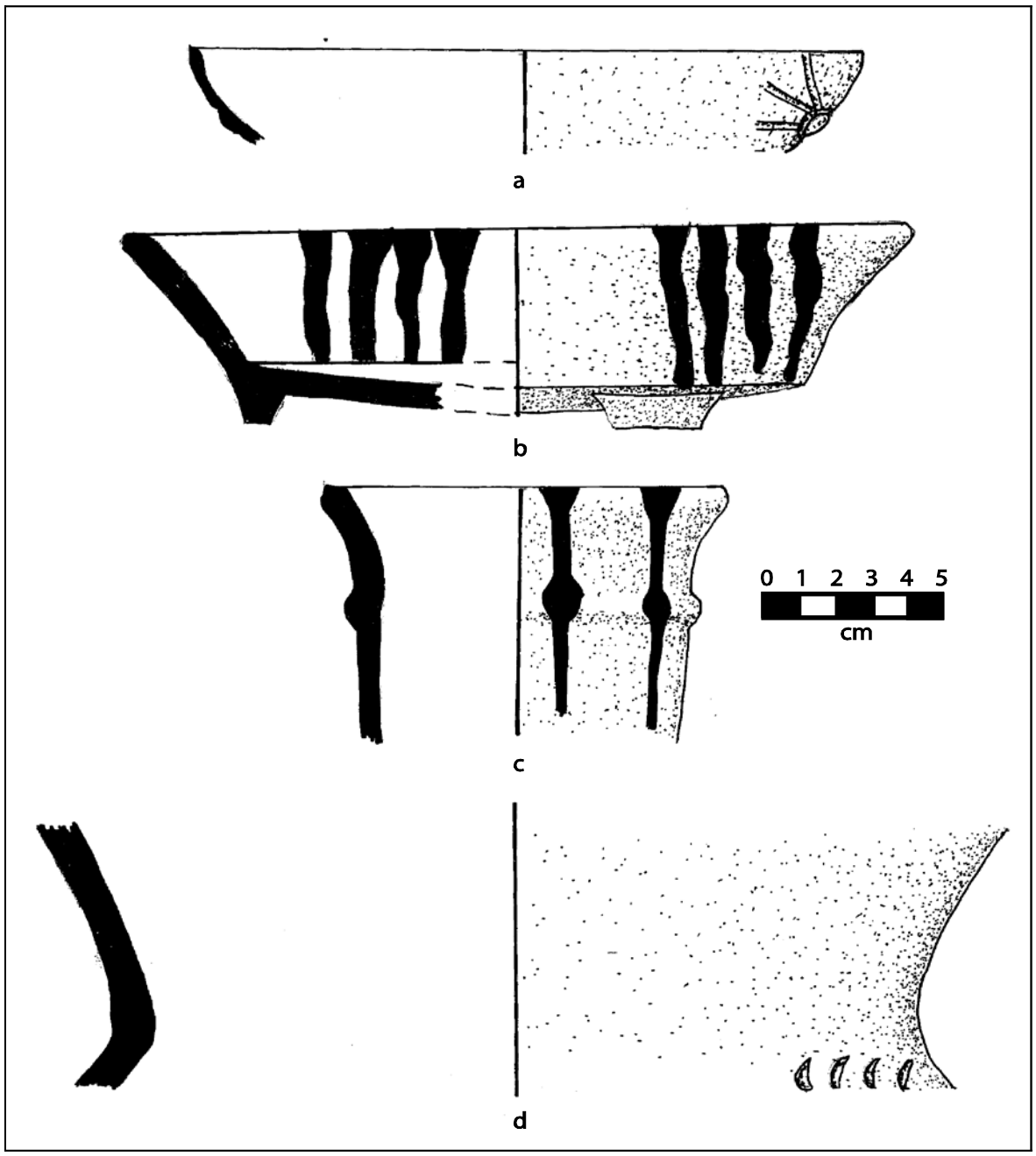


Figure 352. Terminal Classic Ceramics, a) Tabi Gouged-Incised (San Felipe), b) Sacalum Black-on-Slate (San Francisco), c) Holactun Black-on-Cream (San Felipe), and d) Halacho Impressed (Parcela Escolar)

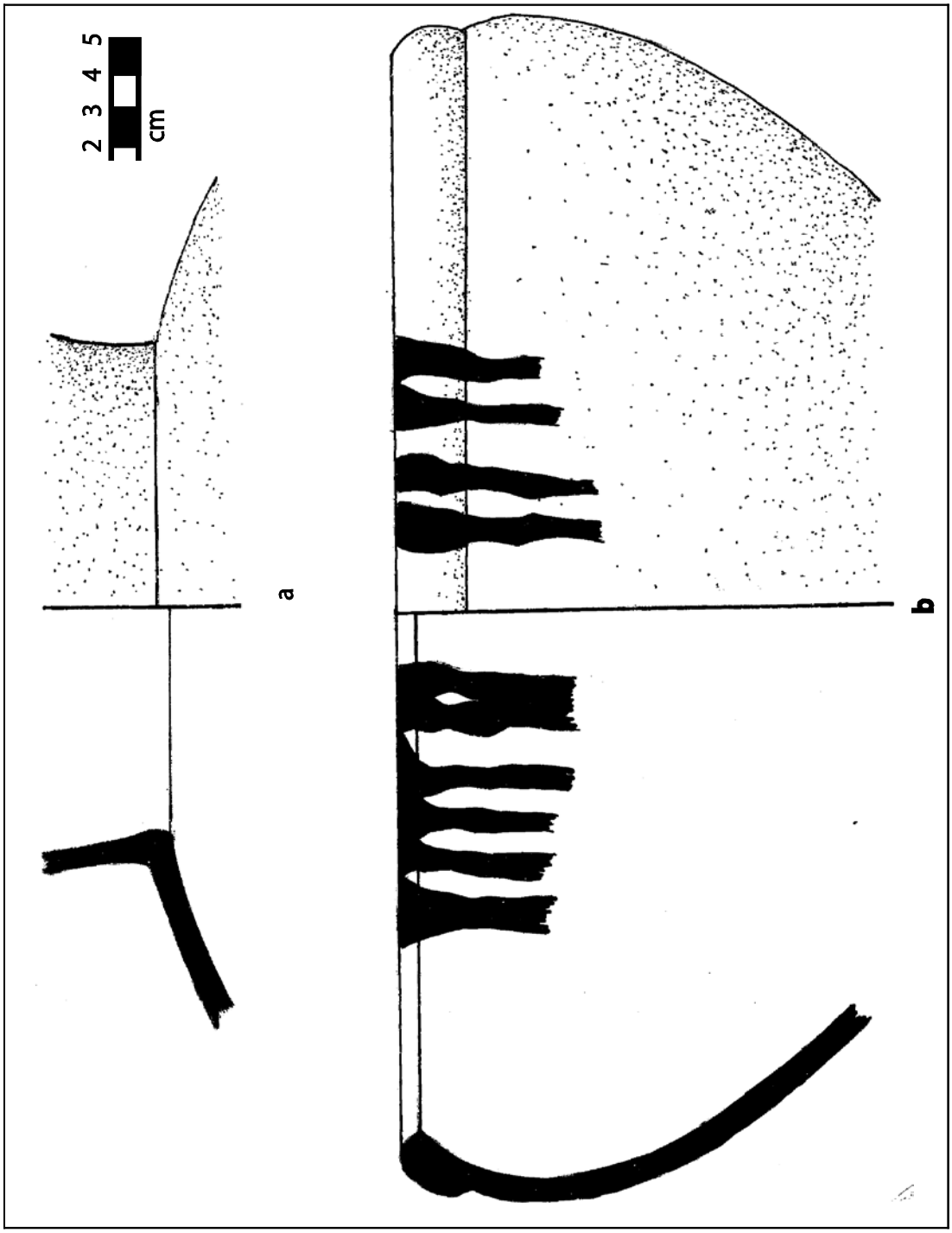


Figure 353. Terminal Classic Ceramics – Chichen Slate, a) Dzitas Slate (San Felipe) and b) Balantun Black-on-Slate (Gruta de Alux)

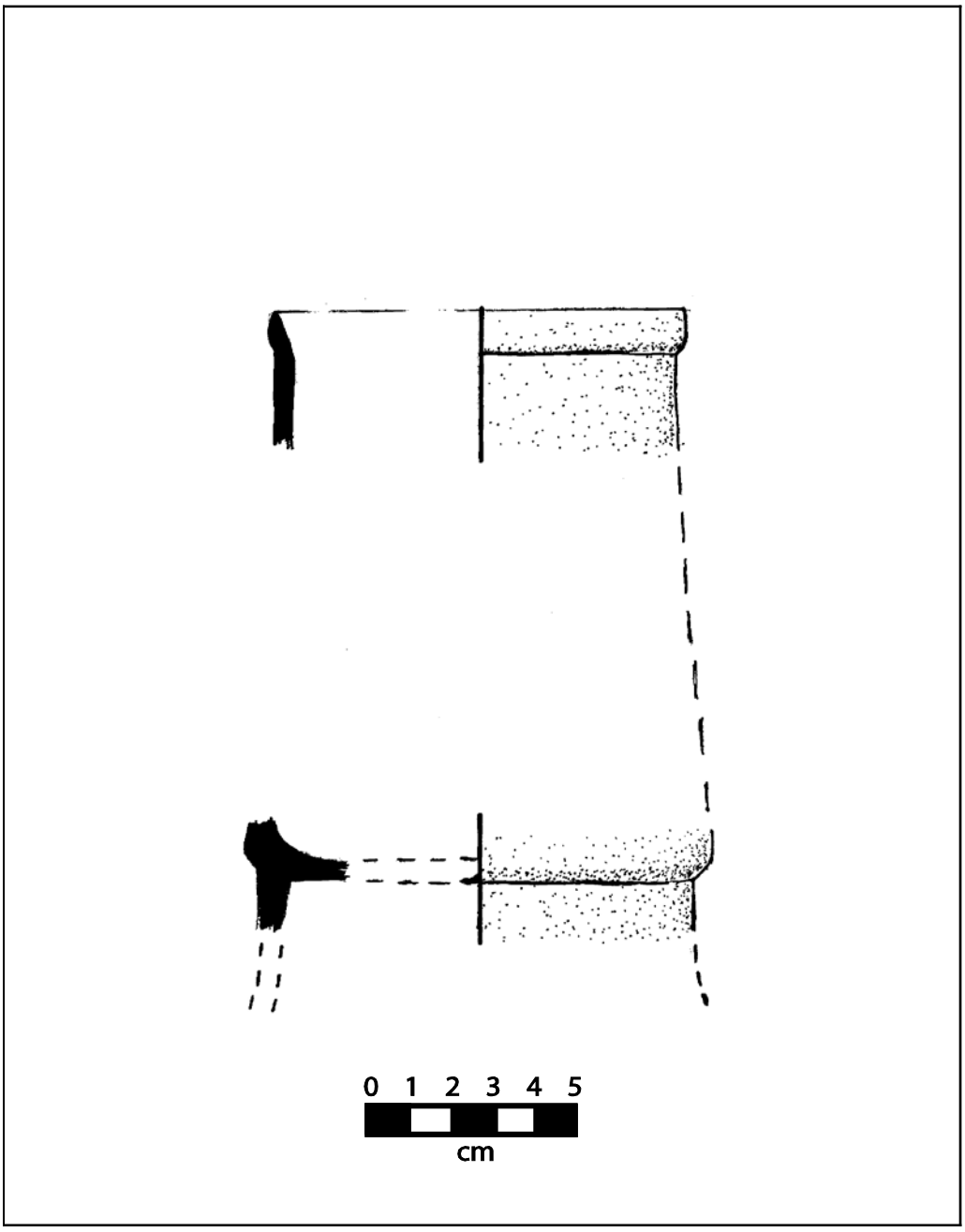


Figure 354. Terminal Classic Ceramics – Fine Orange, Altar Fine Orange (San Felipe)

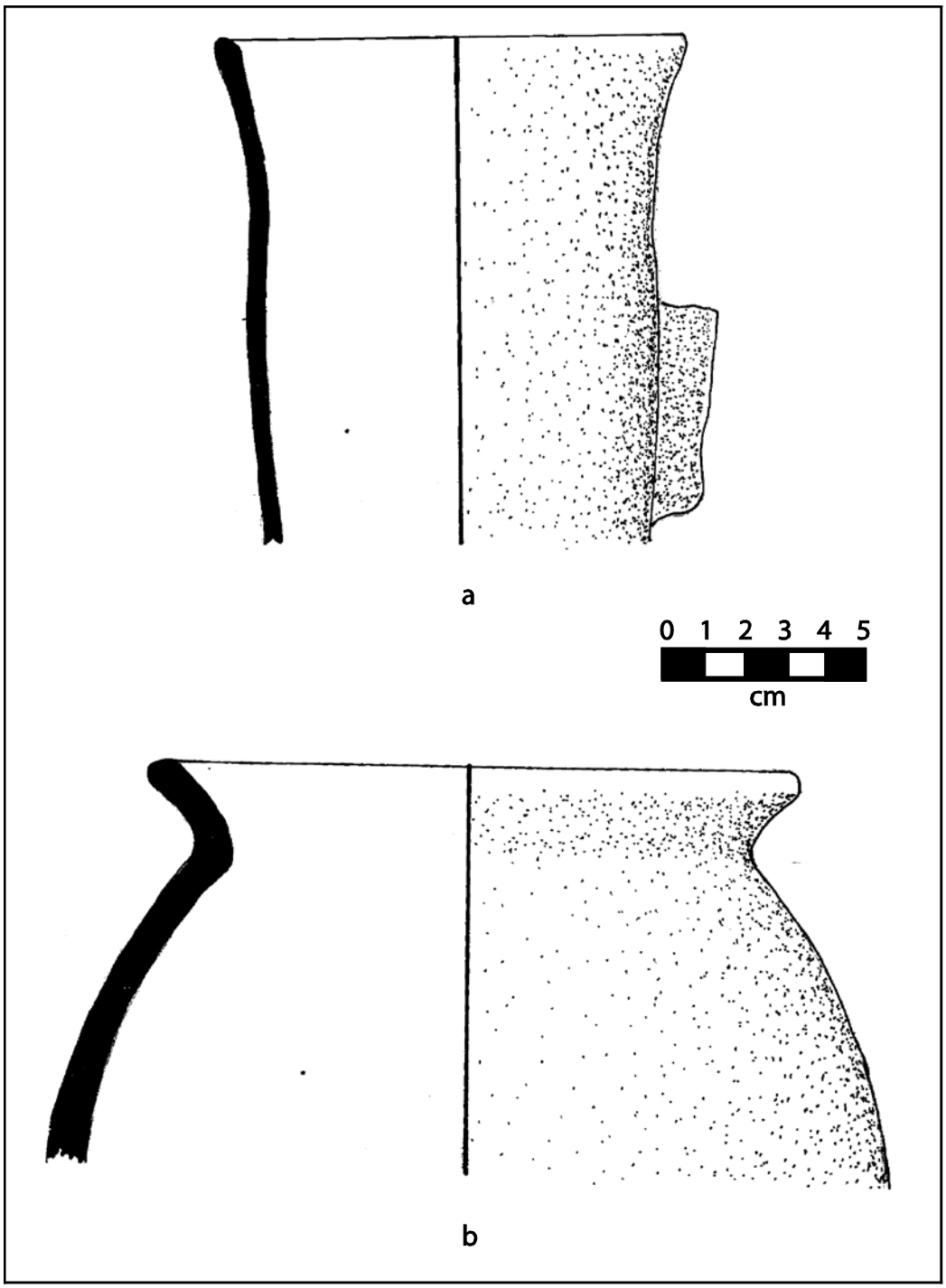


Figure 355. Postclassic Ceramics, a) Chen Mul Modeled (San Francisco) and b) Navula Unslipped (San Felipe)

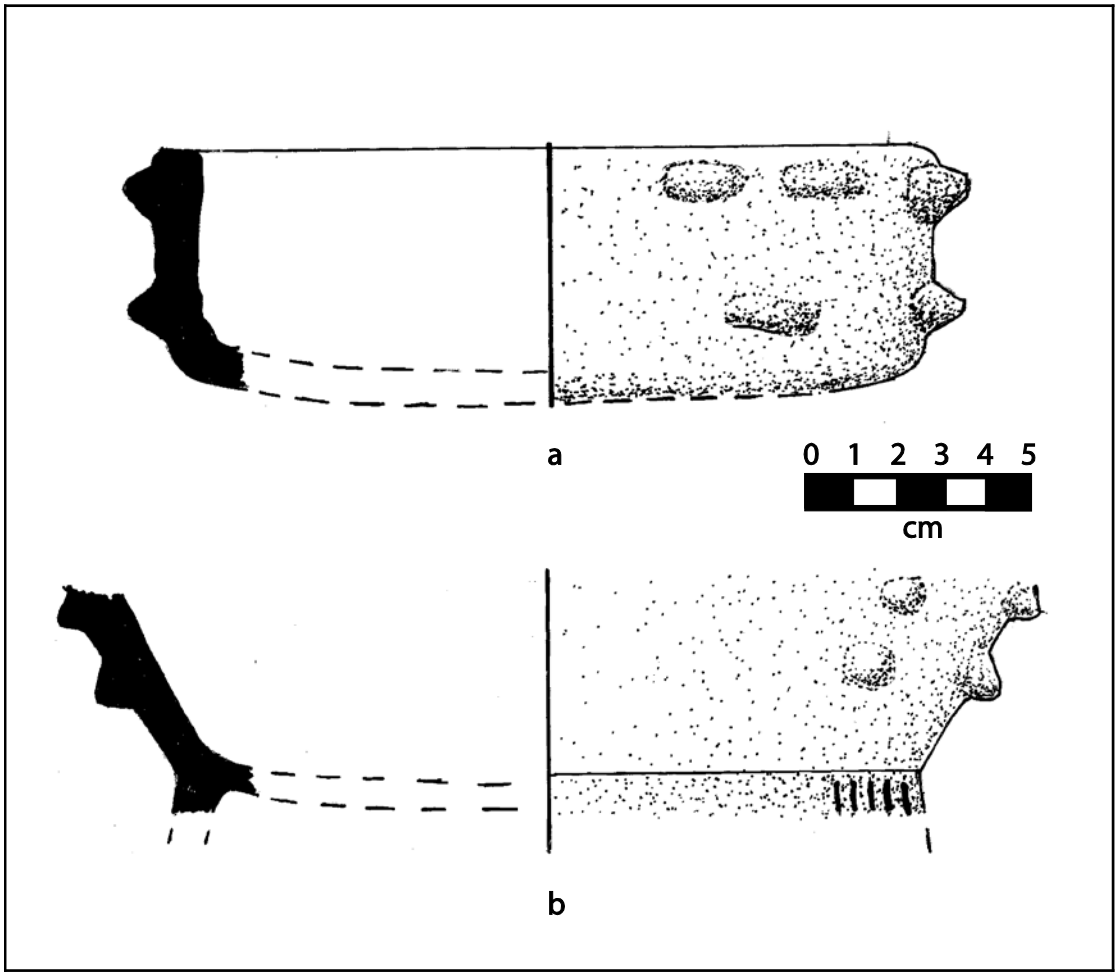


Figure 356. Postclassic Ceramics, a) Thul Applique (San Francisco) and b) Tepekan Composite (San Felipe)

Table 1. Ceramics from Parcela Escolar

Type	4/1/1	4/1/2	4/1/3	4/1/4	4/1/5	4/1/6
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Tipikal Red on Striated						
Chancenote Unslipped				1		
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red				7		
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red				1		
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black				1		
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 1. Ceramics from Parcela Escolar

Type	4/1/1	4/1/2	4/1/3	4/1/4	4/1/5	4/1/6
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red				1		
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Halacho Impressed						
Chum Unslipped						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	1	1	3	12		1
Muna Slate	1		2	9		
Sacalum Black on Slate	1					
Tekit Incised				1		
Akil Impressed						
Teabo Red			1	5	1	
Ticul Thin Slate				1		
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	14	5	25	59		3
Total sherds	17	6	31	98	1	4

Table 1. Ceramics from Parcela Escolar

Type	4/1/7	4/1/8	4/1/9	4/1/10	4/1/11	4/1/12
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Tipikal Red on Striated						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red		1				
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 1. Ceramics from Parcela Escolar

Type	4/1/7	4/1/8	4/1/9	4/1/10	4/1/11	4/1/12
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red		1				
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Halacho Impressed						
Chum Unslipped						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	2	6				
Muna Slate	3	7				
Sacalum Black on Slate						
Tekit Incised						
Akil Impressed						
Teabo Red		6				
Ticul Thin Slate						
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	4	39		30		3
Total sherds	9	60	0	30	0	3

Table 1. Ceramics from Parcela Escolar

Type	4/2/1	4/3/1	4/3/2	4/4/1	4/5/1	5/1/1
Achiotes Unslipped						
Chunhinta Black v. Ucu		1				
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Tipikal Red on Striated						
Chancenote Unslipped				1		
Tancah Unslipped						
Xanaba Red (LF)			2			
Dzalpach Composite						
Sierra Red		3	1	8		1
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted					1	
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated		2				13
Xanaba Red						3
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black		1				
Lucha Incised						
Aguila Orange						2
San Blas Red on Orange						1
Dos Arroyos Orange Polychrome						7
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 1. Ceramics from Parcela Escolar

Type	4/2/1	4/3/1	4/3/2	4/4/1	4/5/1	5/1/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						1
Arena Red						3
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Halacho Impressed						
Chum Unslipped						
Yokat Striated var. Applique						
Yokat Striated var. Yokat						55
Muna Slate						36
Sacalum Black on Slate						1
Tekit Incised						
Akil Impressed						
Teabo Red						3
Ticul Thin Slate						3
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified		3	2	2		54
Total sherds	0	10	5	11	1	183

Table 1. Ceramics from Parcela Escolar

Type	5/1/2	5/1/3	5/1/4	5/1/6	5/1/8	5/1/9
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Tipikal Red on Striated						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated		4	6			
Xanaba Red		1	1			
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange			4			
San Blas Red on Orange						
Dos Arroyos Orange Polychrome		1	1			
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 1. Ceramics from Parcela Escolar

Type	5/1/2	5/1/3	5/1/4	5/1/6	5/1/8	5/1/9
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red			4			
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Halacho Impressed						
Chum Unslipped						
Yokat Striated var. Applique						
Yokat Striated var. Yokat			25	24	38	7	9	9
Muna Slate			4	6	24	7		
Sacalum Black on Slate				1	1			
Tekit Incised					1			
Akil Impressed								
Teabo Red			1	2	1			
Ticul Thin Slate			3	4		1		
Tabi Gouged-Incised								
Navula Unslipped								
Yacman Striated								
Chen Mul Modeled								
Mama Red								
Unidentified			36	27	30	39	37	3
Total sherds			73	70	107	54	46	12

Table 1. Ceramics from Parcela Escolar

Type	5/2/1	5/2/2	5/3/1	Total
Achiotes Unslipped				0
Chunhinta Black v. Ucu				1
Nacolal Incised				0
Joventud Red				0
Desvario Chamfered				0
Guitarra Incised				0
Dzudzuquil Cream to Buff				0
Tumben Incised				0
Tipikal Red on Striated				0
Chancenote Unslipped	2			4
Tancah Unslipped				0
Xanaba Red (LF)				2
Dzalpach Composite				0
Sierra Red	1			22
Laguna Verde Incised				0
Ciego Composite				0
Lagartos Punctate				0
Alta Mira Fluted				1
Repasto Black on Red				0
Flor Cream				0
Mateo Red on Cream				0
Polvero Black				0
Saban Unslipped				0
Yaxcaba Striated	16		10	51
Xanaba Red	4		5	15
Caucel Trickel on Red				0
Tituc Orange Polychrome v. Tituc				0
Tituc Orange Polychrome v. Camichin				0
Tituc Orange Polychrome v. Bandas				0
Balanza Black				2
Lucha Incised				0
Aguila Orange	1	1	1	9
San Blas Red on Orange		1		2
Dos Arroyos Orange Polychrome	2	4	3	18
Cetelac Fiber Tempered				0
Elote Impressed				0
Yalchak Striated				0

Table 1. Ceramics from Parcela Escolar

Type	5/2/1	5/2/2	5/3/1	Total
Dos Caras Striated				0
Sacalaca Striated				0
Encanto Striated v. Sacna				1
Arena Red		3		12
Batres Red				0
Lakin Impressed				0
Muna Slate (LC)				0
Sacalum Black on Slate (LC)				0
Saxche Orange Polychrome				0
Juleki Cream Polychrome				0
Chantori Black on Orange				0
Sayan Red on Cream				0
Halacho Impressed		1		1
Chum Unslipped				0
Yokat Striated var. Applique				0
Yokat Striated var. Yokat	7	34		234
Muna Slate	6	15		120
Sacalum Black on Slate		1		5
Tekit Incised				2
Akil Impressed				0
Teabo Red	1	2		23
Ticul Thin Slate		3		15
Tabi Gouged-Incised				0
Navula Unslipped				0
Yacman Striated				0
Chen Mul Modeled				0
Mama Red				0
Unidentified	56	11		482
Total sherds	96	76	19	1022

Table 2. Ceramics from Sacalaca

Type	5/1/1	5/1/2	5/1/3	5/1/4	5/1/5	5/1/6
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red			1			
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Canaima Incised Dichrome						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red	1					
Laguna Verde Incised			3			1
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red			1			
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 2. Ceramics from Sacalaca

Type	5/1/1	5/1/2	5/1/3	5/1/4	5/1/5	5/1/6
Encanto Striated v. Sacna						
Arena Red		2				
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped			2			7
Yokat Striated var. Applique						
Yokat Striated var. Yokat	8	4	13	6		12
Muna Slate	5	4	30	5	1	40
Sacalum Black on Slate						
Tekit Incised						1
Akil Impressed						
Teabo Red	1	6	2			31
Ticul Thin Slate			2			
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	29	54	80	20		116
Total sherds	44	70	134	31	1	208

Table 2. Ceramics from Sacalaca

Type	5/1/7	5/1/8	5/1/9	5/1/10	5/1/11	5/2/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						4
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Canaima Incised Dichrome						
Chancenote Unslipped						1
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						6
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red					1	
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 2. Ceramics from Sacalaca

Type	5/1/7	5/1/8	5/1/9	5/1/10	5/1/11	5/2/1
Encanto Striated v. Sacna						
Arena Red						
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Yokat Striated var. Applique						
Yokat Striated var. Yokat					10	
Muna Slate					5	8
Sacalum Black on Slate						
Tekit Incised						1
Akil Impressed						
Teabo Red		1	1		2	3
Ticul Thin Slate						
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	2		2	2		75
Total sherds	2	1	3	2	18	98

Table 2. Ceramics from Sacalaca

Type	5/2/2	5/3/1	5/3/2	Total
Achiotes Unslipped	20			20
Chunhinta Black v. Ucu	3	1		8
Nacolal Incised				0
Joventud Red	4			5
Desvario Chamfered				0
Guitarra Incised				0
Dzudzuquil Cream to Buff	16			16
Tumben Incised	1			1
Canaima Incised Dichrome			1	1
Chancenote Unslipped	13		2	16
Tancah Unslipped				0
Xanaba Red (LF)			3	3
Dzalpach Composite				0
Sierra Red	56	7	25	95
Laguna Verde Incised	5		2	11
Ciego Composite				0
Lagartos Punctate				0
Alta Mira Fluted		1		1
Repasto Black on Red				0
Flor Cream				0
Mateo Red on Cream				0
Polvero Black			1	1
Saban Unslipped				0
Yaxcaba Striated				0
Xanaba Red	6			8
Caucel Trickel on Red				0
Tituc Orange Polychrome v. Tituc				0
Tituc Orange Polychrome v. Camichin				0
Tituc Orange Polychrome v. Bandas				0
Balanza Black	2			2
Lucha Incised				0
Aguila Orange				0
Dos Arroyos Orange Polychrome				0
Cetelac Fiber Tempered				0
Elote Impressed				0
Yalchak Striated				0

Table 2. Ceramics from Sacalaca

Type	5/2/2	5/3/1	5/3/2	Total
Encanto Striated v. Sacna				0
Arena Red				2
Batres Red				0
Lakin Impressed				0
Muna Slate (LC)				0
Sacalum Black on Slate (LC)				0
Saxche Orange Polychrome				0
Juleki Cream Polychrome				0
Chantori Black on Orange				0
Sayan Red on Cream				0
Chum Unslipped		1		10
Yokat Striated var. Applique				0
Yokat Striated var. Yokat				53
Muna Slate	11	6	4	119
Sacalum Black on Slate			2	2
Tekit Incised				2
Akil Impressed				0
Teabo Red			1	48
Ticul Thin Slate				2
Tabi Gouged-Incised				0
Navula Unslipped				0
Yacman Striated				0
Chen Mul Modeled				0
Mama Red				0
Unidentified		16	68	464
Total sherds	137	32	109	890

Table 3. Ceramics from Xbaquil

Type	1/1/2	1/2/1	1/2/2	1/3/1	1/4/1	2/1/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Tipikal Red on Striated						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red		1				
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Balanza Black						
Lucha Incised						
Aguila Orange						
Dos Arroyos Orange Polychrome						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Cetelac Fiber Tempered						
Elote Impressed						

Table 3. Ceramics from Xbaquil

Type	1/1/2	1/2/1	1/2/2	1/3/1	1/4/1	2/1/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red						
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Oxcutzcab Applique						
Yokat Striated var. Applique						
Yokat Striated var. Yokat		1	2	1	1	1
Muna Slate	1	7		1		1
Sacalum Black on Slate		2				
Tekit Incised		2		1		
Akil Impressed		1				
Teabo Red		1				
Becal Incised						
Ticul Thin Slate		1				
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	1	16	3	2	1	1
Total sherds	2	32	5	5	2	3

Table 3. Ceramics from Xbaquil

Type	2/1/1	2/2/1	2/3/1	2/4/1	2/4/2	Total
Achiotes Unslipped						0
Chunhinta Black v. Ucu						0
Nacolal Incised						0
Joventud Red						0
Desvario Chamfered						0
Guitarra Incised						0
Dzudzuquil Cream to Buff						0
Tumben Incised						0
Tipikal Red on Striated						0
Chancenote Unslipped						0
Tancah Unslipped						0
Xanaba Red (LF)						0
Dzalpach Composite						0
Sierra Red					4	5
Laguna Verde Incised						0
Ciego Composite						0
Lagartos Punctate						0
Alta Mira Fluted						0
Repasto Black on Red						0
Flor Cream						0
Mateo Red on Cream						0
Polvero Black						0
Saban Unslipped						0
Yaxcaba Striated						0
Xanaba Red						0
Caucel Trickel on Red						0
Tituc Orange Polychrome v. Tituc						0
Balanza Black						0
Lucha Incised						0
Aguila Orange						0
Dos Arroyos Orange Polychrome						0
Tituc Orange Polychrome v. Camichin						0
Tituc Orange Polychrome v. Bandas						0
Cetelac Fiber Tempered						0
Elote Impressed						0
Yalchak Striated						0

Table 3. Ceramics from Xbaquil

Type	2/1/1	2/2/1	2/3/1	2/4/1	2/4/2	Total
Dos Caras Striated						0
Sacalaca Striated						0
Encanto Striated v. Sacna						0
Arena Red						0
Batres Red						0
Lakin Impressed						0
Muna Slate (LC)						0
Sacalum Black on Slate (LC)						0
Saxche Orange Polychrome						0
Juleki Cream Polychrome						0
Chantori Black on Orange						0
Sayan Red on Cream						0
Chum Unslipped						0
Oxcutzcab Applique						0
Yokat Striated var. Applique						0
Yokat Striated var. Yokat	2	3	4	1		16
Muna Slate	1	2	7			20
Sacalum Black on Slate						2
Tekit Incised						3
Akil Impressed						1
Teabo Red	1	1		1		4
Becal Incised						0
Ticul Thin Slate						1
Tabi Gouged-Incised						0
Navula Unslipped						0
Yacman Striated						0
Chen Mul Modeled						0
Mama Red						0
Unidentified	8	25	7	2	5	71
Total sherds	12	31	18	4	9	123

Table 4. Ceramics from San Diego

Type	1/1/1	1/2/2	2/1/1	2/2/1	2/3/1	Total
Achiotes Unslipped						0
Chunhinta Black v. Ucu						0
Nacolal Incised						0
Joventud Red						0
Desvario Chamfered						0
Guitarra Incised						0
Dzudzuquil Cream to Buff						0
Tumben Incised						0
Tipikal Red on Striated						0
Chancenote Unslipped					1	1
Tancah Unslipped						0
Xanaba Red (LF)						0
Dzalpach Composite						0
Sierra Red						0
Laguna Verde Incised						0
Ciego Composite						0
Lagartos Punctate						0
Alta Mira Fluted						0
Repasto Black on Red						0
Flor Cream						0
Mateo Red on Cream						0
Polvero Black						0
Saban Unslipped						0
Yaxcaba Striated						0
Xanaba Red						0
Caucel Trickel on Red						0
Tituc Orange Polychrome v. Tituc						0
Balanza Black						0
Lucha Incised						0
Aguila Orange						0
Dos Arroyos Orange Polychrome						0
Tituc Orange Polychrome v. Camichin						0
Tituc Orange Polychrome v. Bandas						0
Cetelac Fiber Tempered						0
Elote Impressed						0
Yalchak Striated						0

Table 4. Ceramics from San Diego

Type	1/1/1	1/2/2	2/1/1	2/2/1	2/3/1	Total
Dos Caras Striated						0
Sacalaca Striated						0
Encanto Striated v. Sacna						0
Arena Red		1				1
Batres Red						0
Lakin Impressed						0
Muna Slate (LC)						0
Sacalum Black on Slate (LC)						0
Saxche Orange Polychrome						0
Juleki Cream Polychrome						0
Chantori Black on Orange						0
Sayan Red on Cream						0
Chum Unslipped						0
Yokat Striated var. Applique						0
Yokat Striated var. Yokat				2		1
Muna Slate		5		9		14
Sacalum Black on Slate			1			1
Tekit Incised						0
Akil Impressed						0
Teabo Red				3		3
Becal Incised						0
Ticul Thin Slate						0
Tabi Gouged-Incised						0
Navula Unslipped						0
Yacman Striated						0
Chen Mul Modeled						0
Mama Red						0
Unidentified	4	17	3	10	3	37
Total sherds	4	23	4	24	4	59

Table 5. Ceramics from Gruta de Alux

Type	3a/1/1	3b/1/1	3c/1/1	3d/1/1	3e/1/1	3f/1/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Tipikal Red on Striated						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 5. Ceramics from Gruta de Alux

Type	3a/1/1	3b/1/1	3c/1/1	3d/1/1	3e/1/1	3f/1/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red						
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	4	2	3	6		1
Muna Slate	1	1	1	1		
Sacalum Black on Slate						
Tekit Incised						
Akil Impressed				1		
Teabo Red		1				1
Ticul Thin Slate						
Tabi Gouged-Incised						
Balantun Black on Slate						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	20	1	5	5	2	13
Total sherds	25	5	9	13	2	15

Table 5. Ceramics from Gruta de Alux

Type	3g/1/1	3g/1/2	3g/1/3	3g/1/4	3h/1/1	3i/1/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Tipikal Red on Striated						
Chancenote Unslipped			1			
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange						
Dos Arroyos Orange Polychrome			1			
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 5. Ceramics from Gruta de Alux

Type	3g/1/1	3g/1/2	3g/1/3	3g/1/4	3h/1/1	3i/1/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red	2	2				1
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						2
Yokat Striated var. Applique						
Yokat Striated var. Yokat		3	20	1	3	9
Muna Slate	9	1	5		6	5
Sacalum Black on Slate						
Tekit Incised	1					
Akil Impressed						
Teabo Red			1			1
Ticul Thin Slate						1
Tabi Gouged-Incised						
Balantun Black on Slate						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	13	13	83		18	17
Total sherds	25	19	111	1	27	36

Table 5. Ceramics from Gruta de Alux

Type	3i/1/2	3i/2/7	3j/1/1	3j/1/2	Total
Achiotes Unslipped					0
Chunhinta Black v. Ucu					0
Nacolal Incised					0
Joventud Red					0
Desvario Chamfered					0
Guitarra Incised					0
Dzudzuquil Cream to Buff					0
Tumben Incised					0
Tipikal Red on Striated					0
Chancenote Unslipped					1
Tancah Unslipped					0
Xanaba Red (LF)					0
Dzalpach Composite					0
Sierra Red					0
Laguna Verde Incised					0
Ciego Composite					0
Lagartos Punctate					0
Alta Mira Fluted					0
Repasto Black on Red					0
Flor Cream					0
Mateo Red on Cream					0
Polvero Black					0
Saban Unslipped					0
Yaxcaba Striated					0
Xanaba Red					0
Caucel Trickel on Red					0
Tituc Orange Polychrome v. Tituc					0
Tituc Orange Polychrome v. Camichin					0
Tituc Orange Polychrome v. Bandas					0
Balanza Black					0
Lucha Incised					0
Aguila Orange					0
Dos Arroyos Orange Polychrome					1
Cetelac Fiber Tempered					0
Elote Impressed					0
Yalchak Striated					0

Table 5. Ceramics from Gruta de Alux

Type	3i/1/2	3i/2/7	3j/1/1	3j/1/2	Total
Dos Caras Striated					0
Sacalaca Striated					0
Encanto Striated v. Sacna					0
Arena Red	1			3	9
Batres Red					0
Lakin Impressed					0
Muna Slate (LC)					0
Sacalum Black on Slate (LC)					0
Saxche Orange Polychrome					0
Juleki Cream Polychrome					0
Chantori Black on Orange					0
Sayan Red on Cream					0
Chum Unslipped					2
Yokat Striated var. Applique					0
Yokat Striated var. Yokat		1	4	3	60
Muna Slate			1	2	33
Sacalum Black on Slate					0
Tekit Incised					1
Akil Impressed					1
Teabo Red				1	5
Ticul Thin Slate					1
Tabi Gouged-Incised					0
Balantun Black on Slate		2			2
Navula Unslipped					0
Yacman Striated					0
Chen Mul Modeled			1	2	3
Mama Red					0
Unidentified	1	7	18	9	225
Total sherds	2	10	24	20	344

Table 6. Ceramics from San Francisco

Type	1/1/1	1/1/2	1/2/1	1/2/2	1/2/3	1/3/1
Achiotes Unslipped						
Chunhinta Black v. Ucu				1	2	1
Nacolal Incised					1	1
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised					1	
Tipikal Red on Striated						
Chancenote Unslipped				2	1	1
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red				2	4	18
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						1
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated		1		7	12	26
Xanaba Red	2	1		8	19	20
Caucel Trickel on Red		1		2		1
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						2
Lucha Incised						
Aguila Orange						
Dos Arroyos Orange Polychrome		1			2	
Cetelac Fiber Tempered						
Elote Impressed	1	1		1	1	
Yalchak Striated						

Table 6. Ceramics from San Francisco

Type	1/1/1	1/1/2	1/2/1	1/2/2	1/2/3	1/3/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red		2				
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	15	4	2		53	
Muna Slate	12	3	4	1	17	
Sacalum Black on Slate		1	1			
Tekit Incised		1				
Akil Impressed						
Teabo Red	2	1	2		9	
Becal Incised						
Ticul Thin Slate						
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled	54	3				
Mama Red						
Unidentified	24	20	10	19	65	24
Total sherds	110	40	19	43	187	95

Table 6. Ceramics from San Francisco

Type	2/1/1	2/1/2	2/2/1	2/2/2	2/2/3	2/3/1
Achiotes Unslipped						
Chunhinta Black v. Ucu			1			4
Nacolal Incised						1
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff				2		2
Tumben Incised						1
Tipikal Red on Striated						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red		1	4	5	2	9
Laguna Verde Incised			1			1
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated		30	4	1	3	
Xanaba Red		5		2	7	3
Caucel Trickel on Red						1
Tituc Orange Polychrome v. Tituc			1		2	
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black			1		1	2
Lucha Incised						
Aguila Orange		1				
Dos Arroyos Orange Polychrome		1			2	
Cetelac Fiber Tempered						
Elote Impressed					1	
Yalchak Striated						

Table 6. Ceramics from San Francisco

Type	2/1/1	2/1/2	2/2/1	2/2/2	2/2/3	2/3/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red	1			1		
Batres Red						
Lakin Impressed						
Muna Slate (LC)					1	
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome					1	
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed			1			
Oxcutzcab Applique	2	3	2			
Yokat Striated var. Applique	7	2	1		1	
Yokat Striated var. Yokat	176	90	38	17	11	20
Muna Slate	123	85	29	14	15	3
Sacalum Black on Slate	10	6	3	3	4	
Tekit Incised	6	7			2	
Akil Impressed		1	1			
Teabo Red	11	6	1	2	5	3
Becal Incised						
Ticul Thin Slate	4	2	1			
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled	10	2				
Mama Red						
Unidentified	149	102	17	70	72	84
Total sherds	499	344	106	117	130	134

Table 6. Ceramics from San Francisco

Type	2/4/1	Total
Achiotes Unslipped		0
Chunhinta Black v. Ucu	1	10
Nacolal Incised		3
Joventud Red		0
Desvario Chamfered		0
Guitarra Incised		0
Dzudzuquil Cream to Buff		4
Tumben Incised		2
Tipikal Red on Striated		0
Chancenote Unslipped	2	6
Tancah Unslipped		0
Xanaba Red (LF)		0
Dzalpach Composite		0
Sierra Red	1	46
Laguna Verde Incised		2
Ciego Composite		0
Lagartos Punctate		1
Alta Mira Fluted		0
Repasto Black on Red		0
Flor Cream		0
Mateo Red on Cream		0
Polvero Black		0
Saban Unslipped		0
Yaxcaba Striated		84
Xanaba Red		67
Caucel Trickel on Red		5
Tituc Orange Polychrome v. Tituc		3
Tituc Orange Polychrome v. Camichin		0
Tituc Orange Polychrome v. Bandas		0
Balanza Black		6
Lucha Incised		0
Aguila Orange		1
Dos Arroyos Orange Polychrome		6
Cetelac Fiber Tempered		0
Elote Impressed		5
Yalchak Striated		0

Table 6. Ceramics from San Francisco

Type	2/4/1	Total
Dos Caras Striated		0
Sacalaca Striated		0
Encanto Striated v. Sacna		0
Arena Red		4
Batres Red		0
Lakin Impressed		0
Muna Slate (LC)		1
Sacalum Black on Slate (LC)		0
Saxche Orange Polychrome		1
Juleki Cream Polychrome		0
Chantori Black on Orange		0
Sayan Red on Cream		0
Chum Unslipped		0
Halacho Impressed		1
Oxcutzcab Applique		7
Yokat Striated var. Applique		11
Yokat Striated var. Yokat	1	427
Muna Slate		306
Sacalum Black on Slate		28
Tekit Incised		16
Akil Impressed		2
Teabo Red		42
Becal Incised		0
Ticul Thin Slate		7
Tabi Gouged-Incised		0
Navula Unslipped		0
Yacman Striated		0
Chen Mul Modeled		69
Mama Red		0
Unidentified	10	666
Total sherds	15	1839

Table 7. Ceramics from Fortín de Yo'okop

Type	8/2/2	8/2/3	8/3/1	9/1/1	9/1/2	9/2/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff			1			
Tumben Incised			1			
Tipikal Red on Striated						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						1
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 7. Ceramics from Fortín de Yo'okop

Type	8/2/2	8/2/3	8/3/1	9/1/1	9/1/2	9/2/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red						
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	1					
Muna Slate						7
Sacalum Black on Slate						1
Tekit Incised						
Akil Impressed						
Teabo Red						2
Ticul Thin Slate					1	1
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	1	3		6	18	29
Total sherds	2	3	2	6	19	41

Table 7. Ceramics from Fortín de Yo'okop

Type	9/2/2	9/2/3	9/3/1	10/1/1	10/2/1	10/2/2
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Tipikal Red on Striated						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red			3			
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red	1					3
Caucel Trickel on Red	1					
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black	1					
Lucha Incised			1			
Aguila Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 7. Ceramics from Fortín de Yo'okop

Type	9/2/2	9/2/3	9/3/1	10/1/1	10/2/1	10/2/2
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red						
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	1					4
Muna Slate	21	5	4		1	8
Sacalum Black on Slate	1					
Tekit Incised						
Akil Impressed						
Teabo Red		4				
Ticul Thin Slate			1			
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						1
Mama Red						
Unidentified	23	11	11	1	8	44
Total sherds	49	20	20	1	9	60

Table 7. Ceramics from Fortín de Yo'okop

Type	10/3/1	10/3/3	10/3/4	10/3/5	11/1/3	11/1/5
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff	1					
Tumben Incised		1				
Tipikal Red on Striated						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red		1				
Laguna Verde Incised	3					
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 7. Ceramics from Fortín de Yo'okop

Type	10/3/1	10/3/3	10/3/4	10/3/5	11/1/3	11/1/5
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red						
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	7	2				
Muna Slate	20	6			1	
Sacalum Black on Slate						
Tekit Incised						
Akil Impressed						
Teabo Red	1	1				
Ticul Thin Slate	1					
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	90	25	1			2
Total sherds	123	36	1	0	1	2

Table 7. Ceramics from Fortín de Yo'okop

Type	11/2/1	11/3/1	12/1/1	12/2/2	13/1/1	13/3/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Tipikal Red on Striated						
Chancenote Unslipped			1			
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised					1	
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated					6	4
Xanaba Red				1	10	4
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc					1	
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						2
Lucha Incised						
Aguila Orange						
Dos Arroyos Orange Polychrome			1			1
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 7. Ceramics from Fortín de Yo'okop

Type	11/2/1	11/3/1	12/1/1	12/2/2	13/1/1	13/3/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red	1				2	
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						1
Yokat Striated var. Applique					4	
Yokat Striated var. Yokat		2	20	8	113	36
Muna Slate		1	5	2	41	17
Sacalum Black on Slate					4	1
Tekit Incised					1	
Akil Impressed						
Teabo Red					1	
Ticul Thin Slate					2	1
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled				2		
Mama Red						
Unidentified		6	76	45	223	54
Total sherds	1	9	103	58	409	121

Table 7. Ceramics from Fortín de Yo'okop

Type	13/3/2	13/3/3	14/1/1	14/2/1	14/2/2	14/3/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Tipikal Red on Striated						
Chancenote Unslipped			1			
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red			1			
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated	51	15	4	3		1
Xanaba Red	18	6	5	1		1
Caucel Trickel on Red	6	3	9			
Tituc Orange Polychrome v. Tituc		1				
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange	3					1
Dos Arroyos Orange Polychrome	2			4		
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 7. Ceramics from Fortín de Yo'okop

Type	13/3/2	13/3/3	14/1/1	14/2/1	14/2/2	14/3/1
Dos Caras Striated						
Sacalaca Striated					1	
Encanto Striated v. Sacna						1
Arena Red				2		1
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Yokat Striated var. Applique					2	
Yokat Striated var. Yokat	5	2	10	38	61	73
Muna Slate	20	2	6	11	39	17
Sacalum Black on Slate				2	1	1
Tekit Incised						
Akil Impressed					1	
Teabo Red	1			3		3
Ticul Thin Slate	4		1	3	3	
Tabi Gouged-Incised						
Navula Unslipped					3	
Yacman Striated						
Chen Mul Modeled				3		
Mama Red						
Unidentified	59	16	39	75	118	124
Total sherds	169	45	76	145	229	223

Table 7. Ceramics from Fortín de Yo'okop

Type	14/3/2	14/4/1	14/4/2	14/4/5	15/1/1	Total
Achiotes Unslipped						0
Chunhinta Black v. Ucu	1					1
Nacolal Incised						0
Joventud Red						0
Desvario Chamfered						0
Guitarra Incised						0
Dzudzuquil Cream to Buff						2
Tumben Incised						2
Tipikal Red on Striated						0
Chancenote Unslipped		2				4
Tancah Unslipped						0
Xanaba Red (LF)						0
Dzalpach Composite		1				1
Sierra Red					1	7
Laguna Verde Incised						4
Ciego Composite						0
Lagartos Punctate						0
Alta Mira Fluted						0
Repasto Black on Red						0
Flor Cream						0
Mateo Red on Cream						0
Polvero Black						0
Saban Unslipped						0
Yaxcaba Striated	13	17	11	5		130
Xanaba Red	2	2	7	2		63
Caucel Trickel on Red	2	1	1			23
Tituc Orange Polychrome v. Tituc						2
Tituc Orange Polychrome v. Camichin						0
Tituc Orange Polychrome v. Bandas						0
Balanza Black	1					4
Lucha Incised						1
Aguila Orange		1		1		6
Dos Arroyos Orange Polychrome	1		4	2		15
Cetelac Fiber Tempered						0
Elote Impressed						0
Yalchak Striated						0

Table 7. Ceramics from Fortín de Yo'okop

Type	14/3/2	14/4/1	14/4/2	14/4/5	15/1/1	Total
Dos Caras Striated						0
Sacalaca Striated						1
Encanto Striated v. Sacna						1
Arena Red						6
Batres Red						0
Lakin Impressed						0
Muna Slate (LC)				2		2
Sacalum Black on Slate (LC)				2		2
Saxche Orange Polychrome						0
Juleki Cream Polychrome						0
Chantori Black on Orange						0
Sayan Red on Cream						0
Chum Unslipped						0
Halacho Impressed						1
Yokat Striated var. Applique						6
Yokat Striated var. Yokat				5	6	394
Muna Slate						234
Sacalum Black on Slate						11
Tekit Incised						1
Akil Impressed						1
Teabo Red						16
Ticul Thin Slate						18
Tabi Gouged-Incised						0
Navula Unslipped						3
Yacman Striated						0
Chen Mul Modeled						6
Mama Red						0
Unidentified	10	3	10	11	17	1159
Total sherds	30	27	33	30	24	2127

Table 8. Ceramics from Yo'okop

Type	16/1/1	16/2/2	16/2/3	17/1/1	17/2/1	17/3/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Uchben Incised Dichrome						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Petjal Red on Black and Cream inc. var						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite			1			
Sierra Red			3			2
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated		146	37	1		
Xanaba Red		81	6			
Caucel Trickel on Red		24	2			
Tituc Orange Polychrome v. Tituc		7				
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised			1			
Aguila Orange		14	2			
San Blas Red on Orange						
Dos Arroyos Orange Polychrome	1	16	10			
Cetelac Fiber Tempered						
Elote Impressed						

Table 8. Ceramics from Yo'okop

Type	16/1/1	16/2/2	16/2/3	17/1/1	17/2/1	17/3/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red						2
Batres Red						
Lakin Impressed						
Muna Slate (LC)				3		
Sacalum Black on Slate (LC)				1		
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Yokat Striated var. Applique		1				
Yokat Striated var. Yokat	3				3	25
Muna Slate	2	3			4	5
Sacalum Black on Slate			1		1	3
Tekit Incised						
Akil Impressed						
Teabo Red	1		1			
Becal Incised						
Ticul Thin Slate						
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled	3					
Mama Red						
Unidentified	19	53	11	11	9	51
Total sherds	29	345	75	16	17	88

Table 8. Ceramics from Yo'okop

Type	17/4/1	17/4/2	17/4/3	17/5/1	17/6/1	18/1/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Uchben Incised Dichrome						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Petjal Red on Black and Cream inc. var						
Chancenote Unslipped				3		
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted					1	
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped				29	2	
Yaxcaba Striated	49		25	153	123	
Xanaba Red	28	1	14	50	27	
Caucel Trickel on Red	12		4	9	10	
Tituc Orange Polychrome v. Tituc	2			4		
Tituc Orange Polychrome v. Camichin			1			
Tituc Orange Polychrome v. Bandas						
Balanza Black	2			1	1	
Lucha Incised	1				1	
Aguila Orange				1	5	
San Blas Red on Orange						
Dos Arroyos Orange Polychrome	5		2	15	9	
Cetelac Fiber Tempered						
Elote Impressed						

Table 8. Ceramics from Yo'okop

Type	17/4/1	17/4/2	17/4/3	17/5/1	17/6/1	18/1/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red						
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Yokat Striated var. Applique						
Yokat Striated var. Yokat						5
Muna Slate					2	11
Sacalum Black on Slate						
Tekit Incised						
Akil Impressed						
Teabo Red						1
Becal Incised						
Ticul Thin Slate						1
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	49	2	29	49	37	59
Total sherds	148	3	75	314	218	77

Table 8. Ceramics from Yo'okop

Type	18/1/2	18/2/1	19/1/1	19/1/2	19//1/3	19/1/4
Achiotes Unslipped						
Chunhinta Black v. Ucu			1			1
Nacolal Incised			2			
Uchben Incised Dichrome						
Joventud Red						
Desvario Chamfered			1			
Guitarra Incised						3
Dzudzuquil Cream to Buff	1		1			
Tumben Incised	1					
Petjal Red on Black and Cream inc. var						1
Chancenote Unslipped			1			
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red	2			1		
Laguna Verde Incised						1
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red				1		9
Caucel Trickel on Red					1	
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black		1				1
Lucha Incised		1				
Aguila Orange						1
San Blas Red on Orange				1		
Dos Arroyos Orange Polychrome			1	3	2	2
Cetelac Fiber Tempered						
Elote Impressed						

Table 8. Ceramics from Yo'okop

Type	18/1/2	18/2/1	19/1/1	19/1/2	19//1/3	19/1/4
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red			1			
Batres Red						
Lakin Impressed						
Muna Slate (LC)						5
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped		1				
Halacho Impressed						
Yokat Striated var. Applique						
Yokat Striated var. Yokat			8			
Muna Slate			18	3	2	
Sacalum Black on Slate						
Tekit Incised			1			
Akil Impressed						
Teabo Red			4	1	1	
Becal Incised			1	1		
Ticul Thin Slate						
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	4	4	44	27	10	9
Total sherds	8	7	84	38	16	33

Table 8. Ceramics from Yo'okop

Type	19/1/5	19/1/6	19/2/1	20/1/1	20/2/1	20/3/2
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Uchben Incised Dichrome						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						1
Tumben Incised						
Petjal Red on Black and Cream inc. var						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated	2					1
Xanaba Red	2					
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised	1					
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome	2			2		
Cetelac Fiber Tempered						
Elote Impressed						

Table 8. Ceramics from Yo'okop

Type	19/1/5	19/1/6	19/2/1	20/1/1	20/2/1	20/3/2
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red					1	
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome	2					
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Yokat Striated var. Applique						
Yokat Striated var. Yokat				6	3	
Muna Slate		1	1	5		
Sacalum Black on Slate				1		
Tekit Incised						
Akil Impressed						
Teabo Red				6		
Becal Incised						
Ticul Thin Slate						
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	5	3	1	55	9	
Total sherds	14	4	2	75	13	2

Table 8. Ceramics from Yo'okop

Type	20/3/3	20/3/4	20/4/1	20/5/1	21/1/1	21/1/2
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised					1	
Uchben Incised Dichrome						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Petjal Red on Black and Cream inc. var						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red			1	2	1	1
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate					1	
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated	5		1	1	4	5
Xanaba Red	7		1	1	5	10
Caucel Trickel on Red	1					
Tituc Orange Polychrome v. Tituc	1					
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange					1	
San Blas Red on Orange						
Dos Arroyos Orange Polychrome	2		1			
Cetelac Fiber Tempered						
Elote Impressed						

Table 8. Ceramics from Yo'okop

Type	20/3/3	20/3/4	20/4/1	20/5/1	21/1/1	21/1/2
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna	2					
Arena Red	1					
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Yokat Striated var. Applique					3	
Yokat Striated var. Yokat		1			10	13
Muna Slate					10	14
Sacalum Black on Slate						
Tekit Incised						
Akil Impressed						
Teabo Red					5	2
Becal Incised						
Ticul Thin Slate					1	
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	19		6	7	35	24
Total sherds	38	1	10	11	77	69

Table 8. Ceramics from Yo'okop

Type	21/2/1	21/3/2	21/4/2	21/4/3	21/4/4	21/4/5
Achiotes Unslipped						
Chunhinta Black v. Ucu	1				2	
Nacolal Incised						
Uchben Incised Dichrome					2	
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Petjal Red on Black and Cream inc. var						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						3
Dzalpach Composite						
Sierra Red	6			11		2
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted				1		
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated	21	4	6	22	29	
Xanaba Red	25	2	7	22	47	
Caucel Trickel on Red	1	3		3	6	
Tituc Orange Polychrome v. Tituc	2					
Tituc Orange Polychrome v. Camichin					2	
Tituc Orange Polychrome v. Bandas						
Balanza Black			2			
Lucha Incised						
Aguila Orange	2		1		2	
San Blas Red on Orange			1			
Dos Arroyos Orange Polychrome	1	2	1		3	
Cetelac Fiber Tempered						
Elote Impressed						

Table 8. Ceramics from Yo'okop

Type	21/2/1	21/3/2	21/4/2	21/4/3	21/4/4	21/4/5
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red						
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome					1	
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Yokat Striated var. Applique						
Yokat Striated var. Yokat						
Muna Slate				1		
Sacalum Black on Slate						
Tekit Incised						
Akil Impressed						
Teabo Red	1					
Becal Incised						
Ticul Thin Slate						
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	31		5	28	33	
Total sherds	91	11	23	88	127	5

Table 8. Ceramics from Yo'okop

Type	22/1/1	22/2/1	22/2/2	23/1/1	23/2/2	23/3/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Uchben Incised Dichrome						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Petjal Red on Black and Cream inc. var						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						1
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated			2			8
Xanaba Red						4
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome			1			1
Cetelac Fiber Tempered						
Elote Impressed						

Table 8. Ceramics from Yo'okop

Type	22/1/1	22/2/1	22/2/2	23/1/1	23/2/2	23/3/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red		1				
Batres Red						
Lakin Impressed						
Muna Slate (LC)			1		1	
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome		1				
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Yokat Striated var. Applique						
Yokat Striated var. Yokat		2				
Muna Slate		1		1		
Sacalum Black on Slate						
Tekit Incised						
Akil Impressed						
Teabo Red						
Becal Incised						
Ticul Thin Slate						
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled						
Mama Red						
Unidentified	1	24	14	14	20	5
Total sherds	1	29	18	15	21	19

Table 8. Ceramics from Yo'okop

Type	23/3/2	23/4/1	23/4/2	23/5/1	26/3/1	Total
Achiotes Unslipped						0
Chunhinta Black v. Ucu						5
Nacolal Incised						3
Uchben Incised Dichrome						2
Joventud Red						0
Desvario Chamfered						1
Guitarra Incised						3
Dzudzuquil Cream to Buff				7		10
Tumben Incised						1
Petjal Red on Black and Cream inc. var						1
Chancenote Unslipped						4
Tancah Unslipped						0
Xanaba Red (LF)						3
Dzalpach Composite						1
Sierra Red				7		40
Laguna Verde Incised				1		2
Ciego Composite						0
Lagartos Punctate				1		2
Alta Mira Fluted						2
Repasto Black on Red						0
Flor Cream						0
Mateo Red on Cream						0
Polvero Black						0
Saban Unslipped						31
Yaxcaba Striated	7	23	29	36		742
Xanaba Red	1	11	18	52		445
Caucel Trickel on Red		2	7	5		90
Tituc Orange Polychrome v. Tituc			1	2		20
Tituc Orange Polychrome v. Camichin						3
Tituc Orange Polychrome v. Bandas						0
Balanza Black						8
Lucha Incised						5
Aguila Orange		1		2		32
San Blas Red on Orange						2
Dos Arroyos Orange Polychrome	1		3	1		89
Cetelac Fiber Tempered						0
Elote Impressed						0

Table 8. Ceramics from Yo'okop

Type	23/3/2	23/4/1	23/4/2	23/5/1	26/3/1	Total
Dos Caras Striated						0
Sacalaca Striated						0
Encanto Striated v. Sacna						2
Arena Red						0
Batres Red						0
Lakin Impressed						0
Muna Slate (LC)						10
Sacalum Black on Slate (LC)			1			2
Saxche Orange Polychrome			2	7		15
Juleki Cream Polychrome						0
Chantori Black on Orange						0
Sayan Red on Cream						0
Chum Unslipped						1
Halacho Impressed						0
Yokat Striated var. Applique						4
Yokat Striated var. Yokat					3	82
Muna Slate	1				1	86
Sacalum Black on Slate						6
Tekit Incised						1
Akil Impressed						0
Teabo Red						23
Becal Incised						2
Ticul Thin Slate						2
Tabi Gouged-Incised						0
Navula Unslipped						0
Yacman Striated						0
Chen Mul Modeled						3
Mama Red						0
Unidentified	5	10	10	72	4	928
Total sherds	15	47	71	193	8	2720

Table 9. Ceramics from Venadito

Type	1/1/1	2/1/1	2/1/2	2/2/1	2/2/2	3/1/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Tipikal Red on Striated						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red		1				
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						1
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised						
Aguila Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 9. Ceramics from Venadito

Type	1/1/1	2/1/1	2/1/2	2/2/1	2/2/2	3/1/1
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red	1					
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed			1			
Oxcutzcab Applique						
Yokat Striated var. Applique						1
Yokat Striated var. Yokat	23	16	3	5		20
Muna Slate	12	5	8	2		6
Sacalum Black on Slate		2	1			3
Tekit Incised	1	2				
Akil Impressed						
Teabo Red	3	2	3			
Becal Incised						
Ticul Thin Slate		1				
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled	32					18
Mama Red						
Unidentified	37	16	13	5		13
Total sherds	109	45	29	12	0	62

Table 9. Ceramics from Venadito

Type	3/2/1	3/2/2	3/3/1	3/4/1	3/4/2	3/4/3
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised					2	
Tipikal Red on Striated						
Chancenote Unslipped	1					
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red					3	
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated	1		2			
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Balanza Black						
Lucha Incised	1					
Aguila Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 9. Ceramics from Venadito

Type	3/2/1	3/2/2	3/3/1	3/4/1	3/4/2	3/4/3
Dos Caras Striated						
Sacalaca Striated						
Encanto Striated v. Sacna						
Arena Red						
Batres Red						
Lakin Impressed						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Juleki Cream Polychrome						
Chantori Black on Orange						
Sayan Red on Cream						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique						
Yokat Striated var. Applique			1			
Yokat Striated var. Yokat	36	39	23	7	9	3
Muna Slate	42	16	41	2	2	1
Sacalum Black on Slate	2		11	1	2	
Tekit Incised	2		3			
Akil Impressed		1				
Teabo Red	1	1	4		4	
Becal Incised						
Ticul Thin Slate	2	3	5	1		
Tabi Gouged-Incised						
Navula Unslipped						
Yacman Striated						
Chen Mul Modeled	52	16				
Mama Red						
Unidentified	30	19	40	4	9	8
Total sherds	170	95	130	15	31	12

Table 9. Ceramics from Venadito

Type	3/5/1	Total
Achiotes Unslipped		0
Chunhinta Black v. Ucu		0
Nacolal Incised		0
Joventud Red		0
Desvario Chamfered		0
Guitarra Incised		0
Dzudzuquil Cream to Buff		0
Tumben Incised		2
Tipikal Red on Striated		0
Chancenote Unslipped		1
Tancah Unslipped		0
Xanaba Red (LF)		0
Dzalpach Composite		0
Sierra Red		4
Laguna Verde Incised		0
Ciego Composite		0
Lagartos Punctate		0
Alta Mira Fluted		0
Repasto Black on Red		0
Flor Cream		0
Mateo Red on Cream		0
Polvero Black		0
Saban Unslipped		0
Yaxcaba Striated		3
Xanaba Red		1
Caucel Trickel on Red		0
Tituc Orange Polychrome v. Tituc		0
Tituc Orange Polychrome v. Camichin		0
Tituc Orange Polychrome v. Bandas		0
Balanza Black		0
Lucha Incised		1
Aguila Orange		0
Dos Arroyos Orange Polychrome		0
Cetelac Fiber Tempered		0
Elote Impressed		0
Yalchak Striated		0

Table 9. Ceramics from Venadito

Type	3/5/1	Total
Dos Caras Striated		0
Sacalaca Striated		0
Encanto Striated v. Sacna		0
Arena Red		1
Batres Red		0
Lakin Impressed		0
Muna Slate (LC)		0
Sacalum Black on Slate (LC)		0
Saxche Orange Polychrome		0
Juleki Cream Polychrome		0
Chantori Black on Orange		0
Sayan Red on Cream		0
Chum Unslipped		0
Halacho Impressed		1
Oxcutzcab Applique		0
Yokat Striated var. Applique		2
Yokat Striated var. Yokat		184
Muna Slate		137
Sacalum Black on Slate		22
Tekit Incised		8
Akil Impressed		1
Teabo Red		18
Becal Incised		0
Ticul Thin Slate		12
Tabi Gouged-Incised		0
Navula Unslipped		0
Yacman Striated		0
Chen Mul Modeled		118
Mama Red		0
Unidentified		194
Total sherds	0	710

Table 10. Ceramics from San Felipe

Type	9/1/2	9/1/3	9/1/12	9a/1/1	9a/1/2	9b/1/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red					1	
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black					2	
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	9/1/2	9/1/3	9/1/12	9a/1/1	9a/1/2	9b/1/1
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique					4	
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	16		2	4	74	61
Muna Slate	11	1	5	4	45	52
Sacalum Black on Slate			2	1	3	7
Tekit Incised					3	3
Akil Impressed						
Teabo Red					3	
Becal Incised						
Opichen Gouged Incised					1	
Ticul Thin Slate						3
Tabi Gouged-Incised						
Holactun Black on Coarse Cream					9	7
Dzitas Slate						
Balantun Black on Slate					1	
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate					1	
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled	11	1	1		1	6
Mama Red						
Unidentified	39		5	10	107	230
Total sherds	77	2	15	19	255	369

Table 10. Ceramics from San Felipe

Type	9b/1/2	9b/1/3	9c/1/1	9c/1/3	9c/1/6	9c/1/10
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red	1					
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	9b/1/2	9b/1/3	9c/1/1	9c/1/3	9c/1/6	9c/1/10
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique		3				
Tepekan Composite						
Yokat Striated var. Applique	1					
Yokat Striated var. Yokat	54	81			6	2
Muna Slate	34	83	2	1	11	8
Sacalum Black on Slate	2	7			1	1
Tekit Incised	2	5				
Akil Impressed						
Teabo Red	5	5				
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate		3				
Tabi Gouged-Incised						
Holactun Black on Coarse Cream	9	25				
Dzitas Slate	2				1	
Balantun Black on Slate					1	1
Xuku Incised						
Altar Fine Orange	1	1				
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled	2	8				
Mama Red		6				
Unidentified	74	232	7	8	16	14
Total sherds	187	459	9	9	36	26

Table 10. Ceramics from San Felipe

Type	9d/1/1	9d/1/2	9d/1/3	9e/1/1	9e/1/11	9f/1/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red			1			
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	9d/1/1	9d/1/2	9d/1/3	9e/1/1	9e/1/11	9f/1/1
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique						
Tepekan Composite						
Yokat Striated var. Applique					1	
Yokat Striated var. Yokat	35	15	6	4	9	12
Muna Slate	24	18	8	3	6	8
Sacalum Black on Slate		2			1	
Tekit Incised	1					
Akil Impressed	1					
Teabo Red		4				2
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate		2	2			2
Tabi Gouged-Incised						
Holactun Black on Coarse Cream						
Dzitas Slate						
Balantun Black on Slate						
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled	1					1
Mama Red						
Unidentified	51	36	12	3	39	30
Total sherds	113	77	29	10	56	55

Table 10. Ceramics from San Felipe

Type	9f/1/2	9f/1/3	9g/1/1	9g/1/3	9g/1/4	9h/1/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red	1	2				
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange		1				
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	9f/1/2	9f/1/3	9g/1/1	9g/1/3	9g/1/4	9h/1/1
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red				1		
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome		1				
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique		2				
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	31	26	10	18	2	
Muna Slate	20	40	10	37	4	
Sacalum Black on Slate	1	2	1	2		
Tekit Incised		1		1		
Akil Impressed						
Teabo Red		3	1			
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate	2	1	3			
Tabi Gouged-Incised						
Holactun Black on Coarse Cream		32		2		
Dzitas Slate						
Balantun Black on Slate						
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled	11	5				
Mama Red						
Unidentified	35	188	23	55	5	
Total sherds	101	304	48	116	11	0

Table 10. Ceramics from San Felipe

Type	9h/1/2	9i/1/1	9i/1/3	9j/1/1	9j/1/1	9k/1/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red	1					
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red	2		1			
Caucel Trickel on Red			1			
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange			1			
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	9h/1/2	9i/1/1	9i/1/3	9j/1/1	9j/1/1	9k/1/1
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed			1			
Oxcutzcab Applique						
Tepekan Composite	6					
Yokat Striated var. Applique						
Yokat Striated var. Yokat	30	11	57	1		2
Muna Slate	19	11	68	2	3	1
Sacalum Black on Slate		4	7			
Tekit Incised		1				
Akil Impressed						
Teabo Red	3	1	3			
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate	1	2	10			
Tabi Gouged-Incised						
Holactun Black on Coarse Cream	2					
Dzitas Slate						
Balantun Black on Slate						
Xuku Incised	4					
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique	1					
Chen Mul Modeled	22	3	11		1	
Mama Red						
Unidentified	39	17	75	2	7	3
Total sherds	130	50	235	5	11	6

Table 10. Ceramics from San Felipe

Type	9k/1/3	9k/1/4	9k/1/8	9k/1/9	9l/1/1	9l/1/2
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						1
Caucel Trickel on Red						1
Tituc Orange Polychrome v. Tituc	1					5
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	9k/1/3	9k/1/4	9k/1/8	9k/1/9	9l/1/1	9l/1/2
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique						
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	15	2	6		8	19
Muna Slate	14	1	5	1	7	23
Sacalum Black on Slate				1	3	
Tekit Incised	1	1				2
Akil Impressed						
Teabo Red					1	
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate	1				1	
Tabi Gouged-Incised						1
Holactun Black on Coarse Cream	1					23
Dzitas Slate						4
Balantun Black on Slate						
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate	2					
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled	26	9		12	10	13
Mama Red						
Unidentified	33	3	5	11	11	114
Total sherds	94	16	16	25	41	206

Table 10. Ceramics from San Felipe

Type	9m/1/1	9m/1/2	9m/1/3	9m/1/4	9n 1/1	9n/1/2
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	9m/1/1	9m/1/2	9m/1/3	9m/1/4	9n 1/1	9n/1/2
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome				1		
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique					1	
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	13	4	1	90	3	5
Muna Slate	8	9	4	83	3	4
Sacalum Black on Slate	1	1	1	9		
Tekit Incised		1				
Akil Impressed						
Teabo Red		1		6		1
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate				12		
Tabi Gouged-Incised				1		
Holactun Black on Coarse Cream						
Dzitas Slate						
Balantun Black on Slate						
Xuku Incised					1	
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated					1	
Thul Applique						
Chen Mul Modeled		2	1	10	4	
Mama Red						
Unidentified	13	11	4	188	18	3
Total sherds	35	29	11	400	31	13

Table 10. Ceramics from San Felipe

Type	9o/1/1	9o/1/3	9p/1/1	9p/1/2	9p/1/4	10/1/7
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						1
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised		1				
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red		1				1
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						4
Balanza Black		1				
Lucha Incised						
Aguila Orange				1		
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						2
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	9o/1/1	9o/1/3	9p/1/1	9p/1/2	9p/1/4	10/1/7
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique						1
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	2	6	6	14	66	89
Muna Slate	4	8	3	9	53	141
Sacalum Black on Slate	1			2	4	19
Tekit Incised				1	6	2
Akil Impressed						
Teabo Red		1			2	8
Becal Incised						1
Opichen Gouged Incised					1	
Ticul Thin Slate		1	2		7	13
Tabi Gouged-Incised						
Holactun Black on Coarse Cream				6	1	74
Dzitas Slate				2	1	2
Balantun Black on Slate						1
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						1
Yacman Striated						
Thul Applique						
Chen Mul Modeled	6	3		8	11	1
Mama Red						
Unidentified	14	10	12	51	156	398
Total sherds	27	32	23	94	308	759

Table 10. Ceramics from San Felipe

Type	10a/1/1	10a/1/2	10a/1/3	10b/1/1	10c/1/1	10c/1/4
Achiotes Unslipped						
Chunhinta Black v. Ucu		1				
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff	1					
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised	1					
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red	1					
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc		1				
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	10a/1/1	10a/1/2	10a/1/3	10b/1/1	10c/1/1	10c/1/4
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed		1			2	
Oxcutzcab Applique	1	1				
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	16	12	2	10	12	14
Muna Slate	28	31	4	13	15	15
Sacalum Black on Slate	1	4		3		
Tekit Incised	2				1	4
Akil Impressed						
Teabo Red	1		1			2
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate		4		2	2	1
Tabi Gouged-Incised						
Holactun Black on Coarse Cream						4
Dzitas Slate						
Balantun Black on Slate	2					
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled		1		2	2	3
Mama Red						
Unidentified	48	62	9	28	39	26
Total sherds	102	118	16	58	73	69

Table 10. Ceramics from San Felipe

Type	10c/2/1	10d/1/1	10e/1/2	10e/1/3	10e/2/2
Achiotes Unslipped					
Chunhinta Black v. Ucu					
Nacolal Incised					
Joventud Red					
Desvario Chamfered					
Guitarra Incised					
Dzudzuquil Cream to Buff			1		
Tumben Incised					
Chancenote Unslipped					
Tancah Unslipped					
Xanaba Red (LF)					
Dzalpach Composite					
Sierra Red			1		
Laguna Verde Incised					
Ciego Composite					
Lagartos Punctate					
Alta Mira Fluted					
Molas Composite					
Repasto Black on Red					
Flor Cream					
Mateo Red on Cream					
Polvero Black					
Saban Unslipped					
Yaxcaba Striated					1
Xanaba Red					
Caucel Trickel on Red					
Tituc Orange Polychrome v. Tituc					
Tituc Orange Polychrome v. Camichin					
Tituc Orange Polychrome v. Bandas					
Huachinango Incised Bichrome					
Balanza Black					
Lucha Incised					
Aguila Orange					
San Blas Red on Orange					
Dos Arroyos Orange Polychrome					
Cetelac Fiber Tempered					
Elote Impressed					
Yalchak Striated					

Table 10. Ceramics from San Felipe

Type	10c/2/1	10d/1/1	10e/1/2	10e/1/3	10e/2/2	
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red			1			
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique						
Tepekan Composite						
Yokat Striated var. Applique			1			
Yokat Striated var. Yokat	12	18	8	14	19	12
Muna Slate	4	18	14	6	16	10
Sacalum Black on Slate	1	7	1	2	3	2
Tekit Incised		1	1	1		1
Akil Impressed						
Teabo Red				5		
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate		1				1
Tabi Gouged-Incised						
Holactun Black on Coarse Cream					1	
Dzitas Slate					1	1
Balantun Black on Slate						
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled			3		4	
Mama Red						
Unidentified	11	32	41	5	28	26
Total sherds	28	77	72	33	73	53

Table 10. Ceramics from San Felipe

Type	10f/1/3	10f/1/5	10f/2/1	10f/2/2	10g/1/1	10g/1/2
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	10f/1/3	10f/1/5	10f/2/1	10f/2/2	10g/1/1	10g/1/2
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red			1			
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed	1		1	1		
Oxcutzcab Applique	1			1		
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	8	4	33	21	15	10
Muna Slate	11	3	49	20	20	8
Sacalum Black on Slate	3		8	3		
Tekit Incised	2					
Akil Impressed						
Teabo Red			1		2	1
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate			1			
Tabi Gouged-Incised						
Holactun Black on Coarse Cream					1	3
Dzitas Slate			2		1	
Balantun Black on Slate			1			
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped			11			
Yacman Striated						
Thul Applique						
Chen Mul Modeled						
Mama Red						
Unidentified	21	4	66	42	51	23
Total sherds	47	11	174	88	90	45

Table 10. Ceramics from San Felipe

Type	10g/1/3	10g/1/4	10h/1/2	10h/1/3	10i/1/1	10i/1/2
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red	2					
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	10g/1/3	10g/1/4	10h/1/2	10h/1/3	10i/1/1	10i/1/2
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique			4	1		
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	46	1	21	36	5	27
Muna Slate	38	4	16	37	9	13
Sacalum Black on Slate	2			1	3	2
Tekit Incised	1		2			
Akil Impressed						
Teabo Red	1		1			
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate	17				1	
Tabi Gouged-Incised						
Holactun Black on Coarse Cream	3		1			2
Dzitas Slate	1			2		1
Balantun Black on Slate	2					
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled		1			1	
Mama Red						
Unidentified	124	8	63	101	29	37
Total sherds	237	14	108	178	48	82

Table 10. Ceramics from San Felipe

Type	10i/1/3	10i/1/4	10i/2/1	10/j/1/3	10j/4/2	10k/1/1
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red						
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red			2			1
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome			1			
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	10i/1/3	10i/1/4	10i/2/1	10/j/1/3	10j/4/2	10k/1/1
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed			1			
Oxcutzcab Applique	1			1		
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	1		18	36	17	12
Muna Slate		1	17	42	12	15
Sacalum Black on Slate			5	3	1	
Tekit Incised			2	1		
Akil Impressed				1		
Teabo Red		1		1		1
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate	1		1	2	1	4
Tabi Gouged-Incised						
Holactun Black on Coarse Cream						
Dzitas Slate						4
Balantun Black on Slate				2		
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled						
Mama Red						
Unidentified		4	58	129	56	62
Total sherds	3	6	105	218	87	99

Table 10. Ceramics from San Felipe

Type	10k/1/2	10k/1/3	10k/1/6	10l/1/1	10l/1/2	10l/1/3
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red				1		1
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red		1				
Caucel Trickel on Red						1
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						1
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	10k/1/2	10k/1/3	10k/1/6	10l/1/1	10l/1/2	10l/1/3
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique		1				
Tepekan Composite						
Yokat Striated var. Applique						2
Yokat Striated var. Yokat	4	32	1	16	6	29
Muna Slate	8	21	3	20	11	35
Sacalum Black on Slate			3	2	1	8
Tekit Incised						3
Akil Impressed						
Teabo Red	1					1
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate	1			1	1	4
Tabi Gouged-Incised		1				
Holactun Black on Coarse Cream		1	5			
Dzitas Slate		1			1	
Balantun Black on Slate	1					
Xuku Incised						
Altar Fine Orange					1	
Yalton Black on Orange		1				
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled						
Mama Red						
Unidentified	43	118	8	78	41	103
Total sherds	58	177	20	118	62	188

Table 10. Ceramics from San Felipe

Type	10l/1/4	10m/1/1	10m/1/2	10m/1/3	10n/1/1	10n/1/4
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff				1		
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red				2	1	
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red		2			1	
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome				1		
Balanza Black					1	
Lucha Incised						
Aguila Orange					2	
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	10l/1/4	10m/1/1	10m/1/2	10m/1/3	10n/1/1	10n/1/4
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed	1					
Oxcutzcab Applique				4	1	
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	1	17		11	46	1
Muna Slate	2	8	5	22	28	2
Sacalum Black on Slate		3		5		1
Tekit Incised				1		1
Akil Impressed						
Teabo Red		2		3	1	
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate		1	1		2	
Tabi Gouged-Incised						
Holactun Black on Coarse Cream			4	42		
Dzitas Slate						
Balantun Black on Slate					2	
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled		7			1	
Mama Red						
Unidentified	5	33	9	105	154	11
Total sherds	9	73	19	197	240	16

Table 10. Ceramics from San Felipe

Type	10o/1/1	10p/1/1	10q/1/1	10r/1/1	10r/1/4	10s/1/4
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red		1				
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated	1					
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange	1					
San Blas Red on Orange						
Dos Arroyos Orange Polychrome		1				
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	10o/1/1	10p/1/1	10q/1/1	10r/1/1	10r/1/4	10s/1/4
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red				1		
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed		1				
Oxcutzcab Applique	1			1		
Tepekan Composite						
Yokat Striated var. Applique					1	
Yokat Striated var. Yokat	22	18	11	9		
Muna Slate	15	18	8	21	8	5
Sacalum Black on Slate	2		1	3	1	
Tekit Incised	2	1				
Akil Impressed						
Teabo Red		1	1			
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate	1	1	1			
Tabi Gouged-Incised						
Holactun Black on Coarse Cream		1	3	1	2	
Dzitas Slate	3					
Balantun Black on Slate						
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled				4		
Mama Red						
Unidentified	77	83	38		30	10
Total sherds	125	126	63	40	42	15

Table 10. Ceramics from San Felipe

Type	10s/2/2	11/1/1	11/2/1	12/1/1	12/2/2	12/3/1
Achiotes Unslipped						
Chunhinta Black v. Ucu			1			
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised	1					
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red			1			
Laguna Verde Incised			1			
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						1
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc			1			
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange			1			
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	10s/2/2	11/1/1	11/2/1	12/1/1	12/2/2	12/3/1
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique						
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	5		23	6	3	2
Muna Slate	5		10		2	
Sacalum Black on Slate					1	
Tekit Incised						
Akil Impressed						
Teabo Red			4			
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate	2					
Tabi Gouged-Incised						
Holactun Black on Coarse Cream						
Dzitas Slate						
Balantun Black on Slate						
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled						
Mama Red						
Unidentified	55	6	25	21	6	7
Total sherds	68	6	67	27	12	10

Table 10. Ceramics from San Felipe

Type	12/3/2	13/1/1	13/2/1	13/2/2	13/3/2	13/3/3
Achiotes Unslipped						
Chunhinta Black v. Ucu	2					
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						
Chancenote Unslipped						
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red	4					
Laguna Verde Incised						
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black						
Saban Unslipped						
Yaxcaba Striated						
Xanaba Red						
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	12/3/2	13/1/1	13/2/1	13/2/2	13/3/2	13/3/3
Dos Caras Striated						
Encanto Striated v. Sacna	1					
Arena Red						1
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique						
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	9	2			2	
Muna Slate					1	
Sacalum Black on Slate						
Tekit Incised						
Akil Impressed						
Teabo Red	2					
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate						
Tabi Gouged-Incised						
Holactun Black on Coarse Cream						
Dzitas Slate						
Balantun Black on Slate						
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled						
Mama Red						
Unidentified	47	2	2	4	13	
Total sherds	65	4	2	4	16	1

Table 10. Ceramics from San Felipe

Type	13/4/1	13/4/2	13/5/1	13/5/2	13/6/2	13/6/3
Achiotes Unslipped						
Chunhinta Black v. Ucu						
Nacolal Incised						
Joventud Red						
Desvario Chamfered						
Guitarra Incised						
Dzudzuquil Cream to Buff						
Tumben Incised						1
Chancenote Unslipped					1	
Tancah Unslipped						
Xanaba Red (LF)						
Dzalpach Composite						
Sierra Red					4	1
Laguna Verde Incised					1	
Ciego Composite						
Lagartos Punctate						
Alta Mira Fluted						
Molas Composite						
Repasto Black on Red						
Flor Cream						
Mateo Red on Cream						
Polvero Black					1	
Saban Unslipped						
Yaxcaba Striated			2	2		
Xanaba Red					2	
Caucel Trickel on Red						
Tituc Orange Polychrome v. Tituc						
Tituc Orange Polychrome v. Camichin						
Tituc Orange Polychrome v. Bandas						
Huachinango Incised Bichrome						
Balanza Black						
Lucha Incised						
Aguila Orange						
San Blas Red on Orange						
Dos Arroyos Orange Polychrome						
Cetelac Fiber Tempered						
Elote Impressed						
Yalchak Striated						

Table 10. Ceramics from San Felipe

Type	13/4/1	13/4/2	13/5/1	13/5/2	13/6/2	13/6/3
Dos Caras Striated						
Encanto Striated v. Sacna						
Arena Red						
Muna Slate (LC)						
Sacalum Black on Slate (LC)						
Saxche Orange Polychrome						
Chum Unslipped						
Halacho Impressed						
Oxcutzcab Applique						
Tepekan Composite						
Yokat Striated var. Applique						
Yokat Striated var. Yokat	2				6	1
Muna Slate					4	2
Sacalum Black on Slate						
Tekit Incised						
Akil Impressed						
Teabo Red						1
Becal Incised						
Opichen Gouged Incised						
Ticul Thin Slate						
Tabi Gouged-Incised						
Holactun Black on Coarse Cream						
Dzitas Slate						
Balantun Black on Slate						
Xuku Incised						
Altar Fine Orange						
Yalton Black on Orange						
Tojil Plumbate						
Navula Unslipped						
Yacman Striated						
Thul Applique						
Chen Mul Modeled						
Mama Red						
Unidentified	7	1	3	3	38	11
Total sherds	9	1	5	5	57	17

Table 10. Ceramics from San Felipe

Type	13/7/1	Total
Achiotes Unslipped		0
Chunhinta Black v. Ucu		4
Nacolal Incised		0
Joventud Red		0
Desvario Chamfered		0
Guitarra Incised		0
Dzudzuquil Cream to Buff		3
Tumben Incised		3
Chancenote Unslipped		1
Tancah Unslipped		0
Xanaba Red (LF)		0
Dzalpach Composite		0
Sierra Red		19
Laguna Verde Incised		4
Ciego Composite		0
Lagartos Punctate		0
Alta Mira Fluted		0
Molas Composite		1
Repasto Black on Red		0
Flor Cream		0
Mateo Red on Cream		0
Polvero Black		1
Saban Unslipped		0
Yaxcaba Striated		6
Xanaba Red		21
Caucel Trickel on Red		5
Tituc Orange Polychrome v. Tituc		8
Tituc Orange Polychrome v. Camichin		0
Tituc Orange Polychrome v. Bandas		0
Huachinango Incised Bichrome		5
Balanza Black		4
Lucha Incised		0
Aguila Orange		7
San Blas Red on Orange		0
Dos Arroyos Orange Polychrome		5
Cetelac Fiber Tempered		0
Elote Impressed		0
Yalchak Striated		0

Table 10. Ceramics from San Felipe

Type	13/7/1	Total
Dos Caras Striated		0
Encanto Striated v. Sacna		1
Arena Red		5
Muna Slate (LC)		0
Sacalum Black on Slate (LC)		0
Saxche Orange Polychrome		2
Chum Unslipped		0
Halacho Impressed		10
Oxcutzcab Applique		30
Tepekan Composite		6
Yokat Striated var. Applique		6
Yokat Striated var. Yokat	2	1649
Muna Slate	5	1665
Sacalum Black on Slate		172
Tekit Incised		58
Akil Impressed		2
Teabo Red	1	86
Becal Incised		1
Opichen Gouged Incised		2
Ticul Thin Slate	1	124
Tabi Gouged-Incised		3
Holactun Black on Coarse Cream		265
Dzitas Slate		30
Balantun Black on Slate		14
Xuku Incised		5
Altar Fine Orange		3
Yalton Black on Orange		1
Tojil Plumbate		3
Navula Unslipped		12
Yacman Striated		1
Thul Applique		1
Chen Mul Modeled		218
Mama Red		6
Unidentified	13	4821
Total sherds	22	9298

Part 5: Summary and Analysis

Chapter 41: Non-ceramic Prehispanic Artifacts from the 2014 CRAS Field Season

Leslie Reyes

The following non-ceramic Prehispanic artifacts were recorded during the CRAS 2014 field season:

Table 11. Parcela Escolar's Non-ceramic Artifacts

Operation	Artifact Type	Material	Measurement	Color
5/1/2	utilized flake	chert	27 mm wide/ 28 mm long/ 5 mm thick	2.5YR 2.5/4
5/1/5	shatter	chert	21 mm wide/ 30 mm long/ 13 mm thick	10YR 8/2, 10YR 3/1
	knife	chert	21 mm wide/ 50 mm long/ 10 mm thick	5YR 6/4
5/1/7	uniface	chert	31 mm wide/ 21 mm long/ 10 mm thick	10YR 8/1
5/1/8	proximal flake fragment	chert	31 mm wide/ 22 mm long/ 6 mm thick	5YR 6/4
	secondary	chert	19 mm wide/ 16 mm long/ 5 mm thick	2.5YR 2.5/4
	proximal flake fragment	chert	20 mm wide/ 24 mm long/ 6 mm thick	10YR 3/1
5/2/2	knife fragment	chert	46 mm wide/ 20 mm long/ 9 mm thick	10YR 5/1

Table 12. Sacalaca's Non-ceramic Artifacts

Operation	Artifact Type	Material	Measurements	Color
5/1/2	tertiary flake	chert	24 mm wide/ 38 mm long/ 5 mm thick	2.5YR 3/6
5/1/6	shatter	chert	34 mm wide/ 31 mm long/ 14 mm thick	10YR7/2
5/2/1	tertiary flake	limestone	44 mm wide/ 39 mm long/ 7 mm thick	10YR 5/1
	tertiary flake	limestone	46 mm wide/ 6 mm long/ 10 mm thick	7.5YR 5/4
	shatter	chalcedony	35 mm wide/ 19 mm long/ 13 mm thick	7.5YR7/2
	shatter	chert	18 mm wide/ 18 mm long/ 6 mm thick	7.5YR N6/0
5/2/2	core	chert	48 mm wide/ 40 mm long	10YR 5/1, 10YR 8/1
	hammerstone	limestone	62 mm wide/ 82 mm long/ 40 mm thick	10YR 6/4
	knife fragment	chert	45 mm wide/ 39 mm long/ 18 mm thick	10YR 5/1
5/3/1	shatter	chert	29 mm wide/ 20 mm long/ 6 mm thick	10YR 7/2
	shatter	chert	27 mm wide/ 15 mm long/ 4 mm thick	10YR 8/2, 10YR 4/1
	knife fragment	chert	27 mm wide/ 22 mm long/ 11 mm thick	2.5YR 2.5/4

Table 13. San Francisco's Non-ceramic Artifacts

Operation	Artifact Type	Material	Measurements	Color
2/1/2	shatter	chert	15 mm wide/ 18 mm long/ 7 mm thick	10YR 8/2
	blade fragment (middle)	obsidian	10 mm wide/ 19 mm long/ 3 mm thick	10YR 4/1
	broken bark beater	limestone	37 mm wide/ 50 mm long/ 37 mm thick	10YR 6/4
	shatter	chert	30 mm/ 14 mm long/ 10 mm thick	10YR 8/2
	shatter	chert	9 mm wide/ 10 mm long/ 6 mm thick	10 YR 8/2
2/2/1	biface	chert	13 mm wide/ 36 mm long/ 3 mm thick	10 YR 8/4

Table 14. Venadito's Non-ceramic Artifacts

Operation	Artifact Type	Material	Measurements	Color
2/2/1	distal flake fragment	sugary chert	20 mm wide/ 12 mm long/ 6 mm thick	10YR 4/3, 10YR 8/2
3/2/1	blade fragment (middle)	obsidian	10 mm wide/ 21 mm long/ 2mm thick	10YR 5/1
3/2/2	shatter	chert	21 mm wide/ 25 mm long/ 8 mm thick	10YR 5/1
3/3/1	shatter	chert	20 mm wide/ 12 mm long/ 6 mm thick	10YR 8/3
	secondary	chert	21 mm wide/ 16 mm long/ 6 mm thick	10YR 5/1
3/4/1	shatter	chert	11 mm wide/ 21 mm long/ 10 mm thick	10YR 7/1, 10YR 4/1
3/4/2	shatter	chert	36 mm wide/ 29 mm long/ 15 mm thick	5YR 6/2
3/4/3	secondary	chalcedony	19 mm wide/ 25 mm long/ 5 mm thick	10YR 8/1
3/4/4	secondary	chalcedony	21 mm wide/ 32 mm long/ 7 mm thick	10YR 8/1

Table 15. Yo'okop's Non-ceramic Artifacts

Operation	Artifact Type	Material	Measurements	Color
16/1/1	uniface flake	chert	37 mm wide/ 39 mm long/ 8 mm thick	2.5YR 4/4
16/2/3	bead	limestone	11 mm wide/ 36 mm long/ 11 mm thick	10YR 5/1
17/6/1	proximal flake fragment	sugary chert	32 mm wide/ 49 mm long/ 20 mm thick	7.5YR 8/4
	distal flake fragment	chert	17 mm wide/ 10 mm long/ 5 mm thick	10YR 8/2
19/1/1	scraper	chalcedony	14 mm wide/ 33 mm long/ 6 mm thick	10R 5/2
	bipolar core	chalcedony	21 mm wide/ 29 mm long/ 12 mm thick	10YR 6/4
22/2/1	shatter	chert	20 mm wide/ 22 mm long/ 21 mm thick	2.5YR 4/4
22/2/2	blade fragment (middle)	obsidian	9 mm wide/ 8 mm long/ 2 mm thick	10YR 3/1
23/4/1	bipolar uniface	chalcedony	42 mm wide/ 18 mm long/ 11 mm thick	10YR 8/2
23/4/2	thinning flake	chert	14 mm wide/ 28 mm long/ 4 mm thick	10R 6/6
23/5/1	thinning flake	chert	30 mm wide/ 44 mm long/ 10 mm thick	10YR 8/1
	secondary flake	chert	32 mm wide/ 20 mm long/ 4 mm thick	10YR 3/1
	blade fragment	obsidian	9 mm wide/ 24 mm long/ 2 mm thick	10YR 3/1

(proximal)

Table 16. Fortín de Yo'okop's Non-ceramic Prehispanic Artifacts

Operation	Artifact Type	Artifact Type	Measurements	Color
9/1/2	distal flake fragment	chert	23 mm wide/18 mm long/ 4 mm thick	10YR 8/1
9/2/2	primary flake	chert	33 mm wide/ 37 mm long/ 14 mm thick	5YR 6/6
	core fragment	chert	32 mm wide/ 31 mm long/ 21 mm thick	5YR 6/6
	thinning flake	chert	21 mm wide/ 32 mm long/ 4 mm thick	5YR 6/6
	proximal flake fragment	chert	16 mm wide/ 22 mm long/ 3 mm thick	5YR 6/6
10/1/1	proximal flake fragment	chert	35 mm wide/ 32 mm long/ 5 mm thick	10YR 7/3
10/2/2	shatter	chert	14 mm wide/ 23 mm long/ 4 mm thick	10YR 6/4
	shatter	chert	15 mm wide/ 18 mm long/ 5 mm thick	10YR 8/3
	distal flake fragment	chert	14 mm wide/ 15 mm long/ 4 mm thick	10YR 8/3
	secondary flake	sandstone	17 mm wide/ 20 mm long/ 10 mm thick	5Y 4/2
10/3/1	thinning flake	chert	34 mm wide/ 30 mm long/ 4 mm thick	5YR 6/6
	thinning flake	chert	12 mm wide/ 21 mm long/ 2 mm thick	5YR 5/8
	shatter	chert	16 mm wide/ 17 mm long/ 5 mm thick	10YR 8/2
10/3/3	tertiary flake	chert	25 mm wide/ 31 mm long/ 6 mm thick	10YR 8/4
11/1/3	shatter	chert	9 mm wide/ 16 mm long/ 2 mm thick	5YR 5/3
11/2/1	shatter	chert	23 mm wide/ 18 mm long/ 18 mm thick	10YR 5/1
11/2/2	proximal flake fragment	chert	33 cm wide/ 34 mm long/ 7 mm thick	10YR 8/1
11/3/1	shatter	obsidian	12 mm wide/ 10 mm long/ 5 mm thick	10YR 5/1
12/1/1	distal flake fragment	chert	27 mm wide/ 37 mm long/ 4 mm thick	10YR 6/1, 10YR 8/3
	distal flake fragment	chert	24 mm wide/ 14 mm long/ 2 mm thick	10YR 7/3
	proximal flake fragment	chert	24 mm wide/ 17 mm long/ 4 mm thick	5YR 7/4
13/1/1	proximal flake fragment	chert	20 mm wide/ 24 mm long/ 5 mm thick	10YR 7/1, 10YR 8/1
	blade fragment (middle)	obsidian	12 mm wide/ 23 mm long/ 4 mm thick	10YR 5/1
	blade fragment (proximal)	obsidian	12 mm wide/ 21 mm long/ 2 mm thick	10YR 5/1
	blade fragment (middle)	obsidian	7 mm wide/ 22 mm long/ 2 mm thick	10YR 5/1
	distal flake fragment	chert	37 mm wide/ 29 mm long/ 6 mm thick	7.5YR N3/0
14/1/1	blade fragment (proximal)	obsidian	10 mm wide/ 27 mm long/ 3 mm thick	10YR 5/1
14/2/1	shatter	chert	17 mm wide/ 26 mm long/ 15 mm thick	10YR 8/3
	distal flake fragment	chert	14 mm wide/ 13 mm long/ 4 mm thick	10YR 7/3

14/2/2	blade fragment (middle)	obsidian	10 mm wide/ 15 mm long/ 2 mm thick	10YR 5/1
14/3/1	blade fragment (proximal)	obsidian	9 mm wide/ 20 mm long/ 2 mm thick	10YR 5/1
	blade fragment (middle)	obsidian	10 mm wide/ 21 mm long/ 2 mm thick	10YR 5/1

Table 17. San Felipe's Non-ceramic Artifacts

Operation	Artifact Type	Material	Measurements	Color
9b/1/1	thinning flake	chert	21 cm wide/ 30 mm long/ 2 mm thick	10YR 5/2
9l/1/2	blade fragment (middle)	obsidian	12 mm wide/ 9 mm long/ 2 mm thick	10YR 5/1
	blade fragment (middle)	obsidian	12 mm wide/ 13 mm long/ 2 mm thick	10YR 4/1
10d/1/1	tertiary flake	limestone	40 mm wide/ 32 mm long/ 6 mm thick	10YR 8/2, 10YR 6/2
10f/1/3	blade fragment (middle)	obsidian	10 mm wide/ 26 mm long/ 3 mm thick	10YR 5/1
10g/1/1	secondary flake	chert	46 mm wide/ 35 mm long/ 13 mm thick	10YR 8/3, 10YR 5/2
10g/1/2	abrader	sandstone	40 mm wide/ 83 mm long/ 6 mm thick	10YR 5/1
10g/1/3	tertiary flake	chert	44 mm wide/ 28 mm long/ 19 mm thick	10YR 8/1
10h/1/2	blade fragment (middle)	obsidian	10 mm wide/ 30 mm long/ 3 mm thick	10YR 5/1
10h/1/3	blade fragment (distal)	obsidian	10 mm wide/ 34 mm long/ 2mm thick	5Y 4/4
10i/1/2	blade fragment (middle)	obsidian	10 mm wide/28 mm long/ 2 mm thick	10YR 5/1
10l/1/3	distal flake fragment	chert	14 mm wide/ 21 mm long/ 5 mm thick	10YR 8/2, 10YR 7/1
10r/1/6	secondary flake	chalcedony	32 mm wide/ 24 mm long/ 5 mm thick	2.5YR 6/4
10/1/2007	biface	chalcedony	24 mm wide/ 49 mm long/ 4 mm thick	10YR 8/1
	hammerstone	chert	56 mm wide/ 52 mm long/ 42 mm thick	10YR 5/1
12/1/1	distal flake fragment	chert	11 mm wide/ 13 mm long/ 3 mm thick	2.5YR 6/4
	distal flake fragment	limestone	13 mm wide/ 10 mm long/ 3 mm thick	10YR 7/3
12/3/2	shatter	chert	16 mm wide/ 45 mm long/ 7 mm thick	10YR 7/1
13/7/1	flake	chert	41 mm wide/ 57 mm long/ 19 mm thick	10YR 8/4

Part 5: Summary and Analysis

Chapter 42: Postclassic Chen Mul Effigy Censers from the Cochuah Region

Karleen Ronsairo

Introduction

Postclassic Chen Muls are known as effigy censers, or *incensarios*. Effigy censers are coarse, unslipped pottery with a deity figure attached to a vessel in which the Ancient Maya burned *copal*, or tree resin, as incense. It is suggested that these effigy censers were placed at the foot of an altar and used in ceremonial shrines during rituals of renewal (Masson 1999; Thompson 2005). They are commonly identified as the Chen Mul Modeled type from the Late Postclassic Maya capital, Mayapan (Smith 1971). Excavations during the 2014 Cochuah Regional Archaeological Survey recovered large samples of Postclassic Chen Mul fragments from four sites in the project area: San Felipe, San Francisco, Venadito, and Fortín de Yo'okop. Visual analysis of the Chen Mul fragments recovered from the Cochuah region suggests that the deities portrayed in this collection are comparable to other Postclassic Chen Mul collections from cotemporaneous sites throughout the Yucatán Peninsula and northern Belize, such as Mayapan (Smith 1971), Tulum (Sanders 1960), Santa Rita Corozal (Chase 1985; Chase and Chase 2008; Sidrys 1983), and Chan Chen (Sidrys 1983). The Postclassic Chen Mul fragments may also provide insight into the changes in Maya power and ideology in the Cochuah region during the transition from the Terminal Classic to the Postclassic period, as well as the ritual activities associated with Postclassic Chen Mul effigy censers. During this transition, Maya ideology and religion centered on kingly power was replaced by folk religion that glorified deities (Johnstone 2008).

Visual Analysis of Postclassic Chen Mul Effigy Censers from the Cochuah Region

The Postclassic Chen Mul fragments were recovered from 2x2m test pits excavated near the base of temple mounds at San Francisco and Venadito, and from excavations of Structures N4E4-3 and N4E5-6 at San Felipe. After washing and labeling the ceramics from each site, level, and lot, visual analysis of the Postclassic Chen Mul fragments began by sorting them into classes and counting the number of fragments in each class, which were organized into tables by site (Tables 18-21). The classes include Body Part, Adornment, Vessel Part, Held Objects, Miscellaneous Attached Objects, and Unidentified. After sorting and counting the Chen Mul fragments, photographs were taken of diagnostic fragments that may indicate elements of deities portrayed on Postclassic Chen Mul effigy censers from the Cochuah region, thus providing insight into the deities glorified in the Cochuah region. The diagnostic fragments of Postclassic Chen Mul effigy censers from the Cochuah region allow us to compare the deities portrayed in this collection with Postclassic Chen Mul collections from cotemporaneous sites in the Yucatán Peninsula and northern Belize.

Class	12/2/2	14/2/1	Total
Body Part			
Arm		1	1
Eye			0
Foot			0
Finger			0
Nose			0
Head			0
Leg/Arm			0
Adornment			
Earspool			0
Loincloth			0
Feather	1		1
Rope			0
Oval			0
Flange			0
Headdress			0
Bracelet			0
Foliage			0
Vessel Part			
Rim		1	1
Body	1		1
Foot			0
Armature			0
Curvature			0
Held Objects			0
Misc Attached Objects			0
Unidentified		1	1
Total	2	3	5

Table 18. Chen Mul Ceramics from Fortín de Yo'okop in 2014

Class	1/1/1	3/1/1	3/2/1	3/2/2	Total
Body Part					0
Arm			2		0
Eye				1	1
Foot					0
Finger	1			2	3
Nose					0
Head					0
Leg/Arm					0
Adornment					0
Earspool			1		1
Loincloth	1				1
Feather	8	3	6	1	18
Rope		1			1
Oval		1			1
Flange	1		1		2
Headdress					0
Bracelet					0
Foliage					0
Vessel Part					
Rim		3	6	1	9
Body	4		8		12
Foot			1		1
Armature	1	2	1	1	5
Curvature	7		5	1	13
Held Objects					0
Misc Attached Objects					0
Unidentified	9	7	21	8	45
Total	32	17	52	15	116

Table 19. Chen Mul Ceramics from Venadito in 2014

Class	SFE/10b/1/1	SFE/10e/1/2	SFE/10e/2/2	SFE/10j/1/1
Body Part				
Arm				
Eye				
Foot				
Finger				
Nose				
Head				
Leg/Arm				
Adornment				
Earspool				
Loincloth				
Feather				
Rope				
Oval				
Flange				
Headdress				
Bracelet				
Foliage				
Vessel Part				
Rim			1	
Body		1	1	3
Foot				1
Armature				
Curvature	1	1		
Held Objects				
Misc Attached Objects				
Unidentified	1	1	2	
Total	2	3	4	4

Table 20. Chen Mul Ceramics from San Felipe in 2014
(continued)

Class	SFE/10l/1/4	SFE/10m/1/1	SFE/10r/1/1	SFE/10/1/7/collapse
Body Part				
Arm		1		
Eye				
Foot				
Finger				
Nose				
Head				
Leg/Arm				
Adornment				
Earspool				
Loincloth		2		
Feather				
Rope				
Oval				
Flange		1		
Headdress				1
Bracelet				
Foliage				
Vessel Part				
Rim			1	
Body	2	1		
Foot				
Armature				
Curvature			2	
Held Objects				
Misc Attached Objects				
Unidentified	1	2	1	
Total	3	7	4	1

Table 20. Chen Mul Ceramics from San Felipe in 2014
(continued)

Class	SFE/9b/1/1	SFE/9b/1/2	SFE/9b/1/3,2northeast	SFE/9b/3,2northeast
Body Part				
Arm				
Eye				
Foot				
Finger				
Nose				
Head				
Leg/Arm			1	
Adornment				
Earspool				
Loincloth				
Feather				
Rope				
Oval				
Flange	1		1	
Headdress				
Bracelet				
Foliage				
Vessel Part				
Rim				
Body		1	1	
Foot				1
Armature		1		
Curvature				
Held Objects				
Misc Attached Objects				
Unidentified	6		2	1
Total	7	2	5	2

Table 20. Chen Mul Ceramics from San Felipe in 2014
(continued)

Class	SFE/9f/1/2	SFE/9f/1/3	SFE/9h/1/2	SFE/9i/1/1
Body Part				
Arm				
Eye				
Foot				
Finger				
Nose				
Head				
Leg/Arm				
Adornment				
Earspool				
Loincloth				
Feather	1			
Rope				
Oval				
Flange			1	
Headdress				
Bracelet				1
Foliage				
Vessel Part				
Rim			3	
Body	2		7	
Foot				
Armature				
Curvature	1	2	1	
Held Objects			1	
Misc Attached Objects				
Unidentified	7	3	9	2
Total	11	5	22	3

Table 20. Chen Mul Ceramics from San Felipe in 2014
(continued)

Class	9i/1/3,2northeast	9j/surface	9k/1/3	9k/1/4
Body Part				
Arm				
Eye	1			
Foot				
Finger				
Nose				1
Head				
Leg/Arm				
Adornment				
Earspool		1		
Loincloth	4		2	1
Feather	1		3	
Rope				
Oval	1		3	
Flange	2		3	1
Headdress				
Bracelet				
Foliage			1	
Vessel Part				
Rim			1	
Body			12	
Foot				
Armature				1
Curvature			2	
Held Objects				
Misc Attached Objects				
Unidentified	2		9	5
Total	11	1	36	9

Table 20. Chen Mul Ceramics from San Felipe in 2014
(continued)

Class	9k/1/9	9l/1/1	9l/1/2	9m/1/2
Body Part				
Arm				
Eye				
Foot				
Finger				
Nose				
Head				
Leg/Arm				
Adornment				
Earspool				
Loincloth			1	
Feather	3	1	1	
Rope				
Oval	1			
Flange		1		
Headdress				
Bracelet				
Foliage				
Vessel Part				
Rim		3		
Body	2	4	5	2
Foot				
Armature				1
Curvature	2		2	
Held Objects				
Misc Attached Objects				
Unidentified	4	1	4	2
Total	12	10	13	5

Table 20. Chen Mul Ceramics from San Felipe in 2014
(continued)

Class	9m/1/3	9m/1/4	9n/surface	9o/surface
Body Part				
Arm				
Eye				
Foot				
Finger				
Nose				
Head				
Leg/Arm				
Adornment				
Earspool				
Loincloth				
Feather				
Rope				
Oval				
Flange		1	1	
Headdress				
Bracelet				
Foliage				
Vessel Part				
Rim		2	1	1
Body			1	4
Foot				
Armature				
Curvature				
Held Objects				
Misc Attached Objects	1			
Unidentified		8	1	1
Total	1	11	4	6

Table 20. Chen Mul Ceramics from San Felipe in 2014
(continued)

Class	9o/1/3	9p/1/2	9p/1/3	9p/1/4	9/1/12 east ext. wall	Total
Body Part						
Arm		1		1		3
Eye						1
Foot						0
Finger						0
Nose						1
Head						0
Leg/Arm					1	2
Adornment						
Earspool						1
Loincloth		1				11
Feather				1		11
Rope						0
Oval						5
Flange			1			14
Headdress						1
Bracelet						1
Foliage						1
Vessel Part						
Rim		1				14
Body	2		1	4		56
Foot						2
Armature						3
Curvature		3				17
Held Objects						1
Misc Attached Objects						1
Unidentified	1	2		5		83
Total	3	8	2	11	1	229

Table 20. Chen Mul Ceramics from San Felipe in 2014

Class	1/1/1	1/1/2	1/surface	2/1/1	Total
Body Part					
Arm			1		1
Eye	1				1
Foot	1				1
Finger				1	1
Nose				1	1
Head				1	1
Leg/Arm					0
Adornment					
Earspool					0
Loincloth	2				2
Feather	4				4
Rope	5				5
Oval	6				6
Flange					0
Headdress		1			1
Bracelet					0
Foliage					0
Vessel Part					
Rim	3			1	4
Body	9				9
Foot					0
Armature	2				2
Curvature					0
Held Objects					0
Misc Attached Objects					1
Unidentified	21	2		5	28
Total	55	3	1	9	68

Table 21. Chen Mul Ceramics from San Francisco in 2014

Deities Portrayed on Postclassic Chen Mul Effigy Censers from the Cochuah Region

Possible deities portrayed on the Postclassic Chen Mul effigy censers from the Cochuah region include Chac (Rain God, Long-Nosed God), Itzamna (Old God, God D), the God of Merchants, and the Maize God (God E) (Smith 1971; Thompson 2005). In "Deities Portrayed on Censers at Mayapan," Thompson (2005) describes what elements are considered when identifying these deities. Itzamna, the Old God, is depicted with a mouth with a single molar in each corner, a Hebraic nose, and a sunken face (eyes and cheeks) to indicate old age (Thompson 2005:4-5). Chac, also known as the Rain God or the Long-Nosed God, is characterized by a long nose extending downward, a white scroll beneath the eyes, and fangs at each corner of the mouth (Thompson 2005:5-6). The God of Merchants is depicted with a Pinocchio-like nose, jaguar whiskers, a bird headdress, and tusks at each corner of the mouth (Thompson 2005:6-8). The Maize God typically holds in the right hand an offering of a ball of burning incense or of leaves of a maize plant (Thompson 2005:11).

The four major gods described above may not be representative of the entire pantheon (i.e. local gods) of the Cochuah region. However, the Postclassic Chen Mul fragments recovered during the 2014 CRAS field season demonstrate the importance of these major deities in the Postclassic ritual activities performed by the Ancient Maya in the Cochuah region. The diagnostic fragments in the collection include maize cobs (Figures 357-358), feathers on flanges (Figure 359), oval fragments (for adorno appliqué, such as sandal flaps, necklaces, bracelets, etc.) (Figures 360-362), a Chac nose (Figure 363), earspools (Figure 364), twisted ropes (Figure 365), a bird effigy (Figure 366), eyes (including a sunken eye/cheek, probably representing the Old God or Chac) (Figures 367 and 368), a held object (probably held as an offering of burning copal or a maize plant by the Maize God) (Figure 369), and loincloths (Figures 370-373). The presence of adorno appliqué on more than one deity (i.e. oval fragments, feathers on flanges, and earspools) demonstrates that Postclassic Chen Mul effigy censers from the Cochuah region are stylistically and iconographically comparable to other collections from other cotemporaneous sites, such as Mayapan, Tulum, Santa Rita Corozal, and Chan Chen. This interpretation also suggests that the production of Postclassic Chen Mul effigy censers in the Cochuah region may have conformed to the style and iconography of effigy censers from other Postclassic sites in the Yucatán Peninsula and northern Belize. However, the contexts in which other collections were found may be different and they may also represent localized versions of Postclassic Chen Mul effigy censers in terms of style and production.

Figure 357. Chen Mul Maize Cob Flange from San Felipe, Operation 9p, Level 1, Lot 3

Figure 358. Chen Mul Maize Cob Flange from San Felipe, Operation 9m, Level 1, Lot 3

Figure 359. Chen Mul Maize Cob Flange with Feathers from Venadito, Operation 1, Level 1, Lot 1

Figure 360. Chen Mul Oval Fragment from San Francisco, Operation 1, Level 1, Lot 1 (view 1)

Figure 361. Chen Mul Oval Fragment from San Francisco, Operation 1, Level 1, Lot 1 (view 2)

Figure 362. Chen Mul Oval Fragment from San Francisco, Operation 1, Level 1, Lot 1 (view 3)

Figure 363. Chen Mul Chac Nose Fragment from San Francisco, Operation 2, Level 1, Lot 1

Figure 364. Chen Mul Ear Spool or Button Fragment from San Felipe, Operation 9j, Surface

Figure 365. Chen Mul Twisted Rope Fragment from San Francisco, Operation 1, Level 1, Lot 1

Figure 366. Chen Mul Bird Effigy Fragment from San Francisco, Operation 1, Level 1, Lot 1

Figure 367. Chen Mul Sunken Eye Fragment from San Felipe, Operation 9i, Level 1, Lot 3

Figure 368. Chen Mul Sunken Eye Fragment from San Felipe, Operation 9p, Level 1, Lot 4

Figure 369. Chen Mul Held Object Fragment from San Felipe, Operation 9h, Level 1, Lot 2

Figure 370. Chen Mul Loincloth Fragment from San Francisco, Operation 1, Level 1, Lot 1

Figure 371. Chen Mul Loincloth Fragment from San Felipe, Operation 9i, Level 1, Lot 3

Figure 372. Chen Mul Loincloth Fragment from San Felipe, Operation 9p, Level 1, Lot 2

Figure 373. Chen Mul Loincloth Fragment from San Felipe, Operation 10m, Level 1, Lot 1

Production, Consumption, and Distribution of Postclassic Chen Mul Effigy Censers from the Cochuah Region

Fragments of body parts (i.e. eyes, arms, and legs) allow us to investigate the mode of production of Postclassic Chen Mul effigy censers from the Cochuah region. Three left arm/hand fragments recovered from the Fortín de Yo'okop, Venadito, and San Francisco are hollow left arms with adorno appliqué formed as a bracelet around the wrist (Figures 374-377). These arm fragments provide us with a way to identify how Chen Mul arms were made and attached to the body of an effigy figure. Arms were hand-modeled and then attached to shoulders by slabbing ceramic paste around the joint and modelling it to form a shoulder. The same method was used in attaching forearms to upper arms to form a bent elbow (Figure 378) and to attach feet to legs (Figures 379 and 380).

Considering the small size and variable style of the fragments, Postclassic Chen Mul effigy censers from the Cochuah region may have been produced on a smaller, more localized scale than those from larger Postclassic sites like Mayapan. If the effigy censers were involved in localized and non-standardized production, this would suggest that they may not have been exchanged through centralized distribution or involved in restricted consumption. However, there is insufficient evidence, especially from domestic contexts, to fully interpret the nature of the economic processes associated with Postclassic Chen Mul effigy censers from the Cochuah region. Regardless, the fact that Postclassic Chen Mul effigy censers are found in the Cochuah region indicates that ritual activities emulating some kind of dominant ideology radiating from larger Postclassic sites like Mayapan were performed in ceremonial contexts throughout the region.

Contextual Analysis of Postclassic Chen Mul Effigy Censers from the Cochuah Region

The contextual (provenience) data of the Postclassic Chen Mul fragments strongly suggests that effigy censers were an important element of rituals performed in public spaces in the Cochuah region. As mentioned above, the samples of Postclassic Chen Mul fragments were recovered from excavations near the base of temple mounds and in ceremonial structures in the Cochuah region. Some of the samples were recovered from excavations near the base of temple mounds at San Francisco and Venadito. However, excavations in ceremonial structures at San Felipe recovered the largest assemblage of Postclassic Chen Mul fragments from the Cochuah region thus far. Structure N4E5-6 (Operation 9) and Structure N4E4-3 (Operation 10) were divided into suboperations that included the interior of the structures; the platforms that the structures were built on top of; the exterior and interiors walls of the structures; the collapse of the interior and exterior walls; and the exterior flat areas surrounding the structures (see Chapters 35 and 36). Postclassic Chen Mul fragments were recovered throughout the structures, but were concentrated in the exterior flat areas in the back side the structures. In Structure N4E5-6, fragments were also concentrated in Suboperations 9j and 9k in the south interior portion of the structure, adjacent to where a Postclassic altar was found (see Chapter 35, Figure 281).

The distribution of these fragments recovered from the base of temple mounds and from the exterior flat areas of ceremonial structures suggests that effigy censers were used during ritual ceremonies performed in these structures, then ritually disposed by being thrown out of the structures. Therefore, the contextual data of Postclassic effigy censers from the Cochuah region suggests that they may have been involved in ritual deposition at these ceremonial structures. Future investigations of ceremonial contexts and recovery of

Figure 374. Chen Mul Left Arm Fragment from Venadito, Operation 3, Level 2, Lot 1

Figure 375. Chen Mul Left Arm Fragment from Fortín de Yo'okop, Operation 14, Level 2, Lot 1

Figure 376. Chen Mul Left Arm Fragment from San Francisco, Operation 1, Surface

Figure 377. Chen Mul Elbow Fragment from San Felipe, Operation 9p, Level 1, Lot 2

Figure 378. Chen Mul Leg Fragment from San Felipe, Operation 9, Level 1, Lot 12 (view 1)

Figure 379. Chen Mul Leg Fragment from San Felipe, Operation 9, Level 1, Lot 12 (view 2)

Figure 380. Chen Mul Leg Fragment from San Felipe, Operation 9, Level 1, Lot 12 (view 3)

Postclassic Chen Mul fragments will hopefully provide further insight into the nature of Postclassic ritual activities in the Cochuah region.

Conclusions

Through visual and contextual analysis of Postclassic Chen Mul fragments recovered during the 2014 CRAS field season, it is clear that the Ancient Maya in the Cochuah region, whether permanent settlers or ritual pilgrims, were influenced by a dominant ideology radiating from the Postclassic Maya capital, Mayapan, through interregional interaction (i.e. trade) (Milbrath et al. 2008). This is evident in the diagnostic fragments that represent important deities in Maya ideology, such as Chac, the Maize God, the God of Merchants, and the Old God. However, although the fragments represent major deities in the Maya pantheon, the Postclassic Chen Mul fragments from the Cochuah region show localized style and variation. Moreover, the variable style of the fragments suggests that they were produced at a smaller, more localized scale than in larger cotemporaneous sites like Mayapan. Additionally, Postclassic Chen Mul effigy censers from the Cochuah region were recovered from ceremonial contexts, at the base of temple mounds and in ceremonial structures. The ceremonial contexts in which the fragments were found suggests that Postclassic Chen Mul effigy censers were an important element in Postclassic ritual activities in the Cochuah region. These Postclassic Chen Mul effigy censers mark the presence of Postclassic ritual activity and the reuse of Terminal Classic structures in Cochuah region, thus providing further insight into the changes in Maya power and ideology during the transition from the Terminal Classic to Postclassic period in the Northern Lowlands.

Part 5: Summary and Analysis

Chapter 43: The Dating and Function of Circular Structures

Dave Johnstone

Identifying the Post-Florescent has been complicated by the continuation of Terminal Classic ceramics beyond the time of the collapse through to the Postclassic. This leaves architecture as the primary means by with the Post-Florescent may be recognized. To date, the primary architectural signature of this period has focused on non-vaulted buildings which lack an enclosing front wall. These buildings often employ Florescent veneer stones, but use *kancab* mortar as a binding agent instead of the concrete hearting of Florescent architecture. This type of architecture has yet to be directly dated, but has been shown to stratigraphically postdate earlier Florescent architecture. Such architectural features have been recorded at many sites in the Northern Lowlands, including: Dzibilchaltun (Santiago 2004), Edzna (Benevides 1995), Xuenkal (Ardren et al. 2005), Chichén Itzá (Ruppert and Smith 1957), Yaxuná (Johnstone 1993), Ek Balam (Bey et al. 1997; Ringle et al. 2004), Uxmal (Ruppert and Smith 1957, Barrera and Huchim 1990, Huchim and Garcia 2000), Xkipche (Prem 2003), Sayil (Ruppert and Smith 1957, Sabloff and Tourtellot 1991), Nohcacab (Shaw and Johnstone 2006), Kuluba (Barrera and Peraza 2006), and Becan (Ball 1985). While various interpretations have been offered to explain these structures, ranging from market stalls (Sabloff and Tourtellot 1992) to administrative functions (Bey et al. 1997), the numbers with which they appear combined with the frequent appearance of a sleeping bench suggests that these structures were residences.

A less commonly occurring Post-Florescent architectural type is the circular foundation brace located on a circular substructure. Like open fronted structures, the circular buildings have foundation braces of well cut, often reused veneer stones with a *kancab* mortar hearting instead of concrete. These foundation braces were not associated with vault stones, and probably supported a conical thatched roof. This class of building has a wide distribution, including Uxmal (Kowalski et al. 1993) and Chichén Itzá (Pollock 1936b) in the Yucatan, and Nohmul (Chase and Chase 1982), Pechtun Ha, Oshon, and Obispo in Belize (Harrison-Buck 2012). Like the open fronted structures, the associated ceramics date to the Terminal Classic Period. The Uxmal example has a Puuc Unslipped jar as a dedicatory offering (Kowalski et al. 1996:285), and is in architectural association with an open fronted building. Either Puuc or Chichen Slateware has been recovered from the structures at Uxmal, Chichén Itzá, and Nohmul. These round superstructures atop round substructures have been uniformly interpreted as shrines, on the basis of associated incense burners at Chichén Itzá (Pollack 1936b), the lack of domestic refuse at Nohmul (Chase and Chase 1982:605), and the associated marine shell and speliothems in the Sibun Valley sites (Harrison-Buck 2012).

A different class of circular structures occurs with some frequency in the Cochuah region. Unlike the shrines, these foundation braces are not built with cut stone or mortar. They consist of a single course of unworked stones set upright in a circle with a space left open for access. This line of stone was likely a foundation brace for a perishable superstructure that included a conical thatched roof. This class of structure has been interpreted as Postclassic or later residences on the basis of domestic artifacts such as *metates* visible on the surface (Harrison 1979:196). In the Cochuah region, the function is less apparent. Few artifacts are visible on the surface. While residences are a possibility, the

small size of the structure might also include granaries, or kitchens. They are found both singly, associated with other structures, or clustered together. As a result, architectural associations do not lend themselves to functional interpretations.

Because of their unusual plan, circular structures are easily identifiable in survey. We have documented sixty six of these features at 18 sites within our research area (Table 22).

Table 22. Post-Florescent Architecture in the CRAS Region

Site	Open Fronted	Circular
Yo'okop	yes	yes
Nohcacab	yes	yes
Chakal Ja'as	yes	yes
Yo'aktun		yes
Gruta de Alux		yes
Rancho Rosales	yes	
San Manuel		yes
Yopila		yes
Sacalaca		yes
Parcela Escolar	yes	yes
San Felipe	yes	
San Lorenzo		yes
Sisal	yes	yes
Candelaria	yes	yes
Abuelos		yes
Palomar	yes	
Chumkatzim		yes
Ramonal Oriente	yes	
Santa Cruz		yes
Xtojil	yes	
Yo'dzonot		yes
Tabasquito		yes
Chumpich		yes
Santa Elena	yes	

They appear to be more common than open fronted structures both in terms of absolute number, and in terms of number of sites in which they have been recorded; however, these features remained something of a mystery. Ceramic samples near two of these have dated to the Terminal Classic, but since these ceramic types have a long period of production and use both leading up to and following the Maya Collapse, we could not say with certainty if they are Florescent or Post-Florescent in date. As a means to overcome the limits of ceramics, stratigraphic relationships between the circular structures and their immediate architectural neighbors, can help to present a relative age of use for the round structures, since we can compare them with their more securely dated associated structures.

Four round structures were excavated during the 2014 field season, at Gruta de Alux, Sacalaca, and Parcela Escolar (see Chapters 13, 29, and 31). Despite their locations at different sites, and in different contexts, the round structures share a number of common features. 1) Regardless of their situation with respect to any possible nearby structures, all of

the round structures are situated on well-drained localities. This may range from locations atop platforms, to the exploitation of bedrock micro-topography. The interior 'floors' of these structures are often pitched to one side. 2) The walls themselves are short; having between one and three courses. 3) There is no evidence of a mortar used to bind the stones, though we cannot rule out the possibility of *kancab* as a binding agent. 4) The stone used to build the walls are uniformly undressed. 5) No features were encountered within any of the circular structures. 6) The area enclosed by the foundation brace is small (Table 23), ranging from 9.6 to 19.6 sq m. 7) Ceramics were not concentrated within the structure, nor is there a functionally specific ceramic sample from within the building. 8) In all cases the ceramics identified date to the Terminal Classic.

Table 23. Area of Round Structures

Site	Structure	Area (sq m)
Gruta de Alux	S1W1-4	9.5
Yodzonot	S1W1-4	9.6
Sacalaca	N5E6-4	12.5
Parcela Escolar	N10W1-2	19.5
Parcela Escolar	N8E-2	19.6

Dating

Dating of the circular foundation braces has been problematic. Test pits placed alongside these structures have produced ceramic samples dating to the Terminal Classic at the sites of Gruta de Alux (Flores 2010), and Yo'donot (Kidder 2012). Where it is possible to see architectural association, two such structures (at Tabasquito and at San Manuel) appear to have been constructed atop earlier buildings. Depictions of circular perishable architecture occur at Chichén Itzá in the murals of the Temple of the Jaguar (Pollock 1936a, figures 6a-c) also suggesting a Terminal classic date.

As noted above, the ceramic samples from all structures date to the Terminal Classic. The continuation of the use of Florescent ceramics into the Post-Florescent has been noted at Ek Balam (Bey et al. 1997:250). Our present inability to distinguish ceramically between these phases is a severe limitation to our understanding of the time surrounding the Collapse. As Andrews and Sabloff (1986:455) noted 30 years ago, stratigraphic relationships for the period between the Florescent and the Postclassic are rare in the Northern Lowlands. This is particularly true for round superstructures. At Xuenkal, Alonso Olvera documented two circular foundation braces as among the last constructions atop a Terminal Classic platform. Within the CRAS study area, the investigated circular structures are built on bare bedrock (Parcela Escolar N10W1-2), atop an Early Classic platform, (Parcela Escolar N8E1-2), atop a Terminal Classic residential platform (Sacalaca N5E6-4), and atop a Terminal Classic ballcourt (Gruta de Alux S1W1-4). While the ceramics place the round structures within the Terminal Classic, their stratigraphic position puts them at the end of this period; in the Post-Florescent phase.

Function

Unfortunately, the wide range of associations with other feature classes does not support a single interpretation regarding function. We hoped to explore the function of the

circular foundation braces by excavating these small structures from a variety of contexts, and determine if the round structures represent a single feature type, or if they fulfilled multiple functions. Functionally, we expect each class of structure to present a distinct archaeological signature (Table 24).

Table 24. Feature Signatures

Feature Type	Expectations
Shrine	Dressed stone walls, plastered floor, possible pits or altars, exotic geofacts/ecofacts, few ceramics that may include ritual items such as incensarios.
Residence	Prepared floor (plaster or *sascab*), high quantities of ceramics; primarily forms related to consumption (plates, bowls, vases), may include lithic debris related to stone tool manufacture or maintenance, may include associated midden to side or rear of structure, may include burial.
Kitchen	May include prepared floor (*sascab*), may include hearth, moderate quantity of ceramics; primarily forms related to food preparation (striated jars, basins), may include lithic artifacts related to food preparation (mano, pestle).
Granary	No prepared floor, few to no ceramics, may include carbonized ecofacts (maize, beans, or squash seeds).

In order to arrive at an interpretation of the function of the circular structures, we will evaluate the feature types given in Table 24.

Hypothesis 1: Shrine. This is the lease likely of the possible functions for this feature class. Architecturally, the round structures we investigated lack the use of dressed stone, *kancab* mortar, or plastered floors typical of shrines. The closest example, structure N8E1-2 from Parcela Escolar does have a single-course platform, and a raised dirt floor, but lacks the finer finishes typical of shrines. In terms of contents, the lack of an altar, obsidian blades for bloodletting, or specialized ceramics such as *incensarios* would also tend to rule out shrines as a possibility.

Hypothesis 2: Residence. Given the range of social or economic status within a stratified society such as the ancient Maya, it is possible to imagine that some residences would be small and simply constructed. In a study of 27 modern residences in the pueblo of Chibilub, Pierreborg (1999, Tables 22 and 23) found that they ranged from 13-50 sq m, and averaged 29.59 sq m. Our sample from the CRAS region, while partially overlapping, falls well below these residential norms in terms of size. With the exception of Structure N8E1-2 from Parcela Escolar, none of the round structures we have investigated has a floor. Perhaps most notable, there is no concentration of ceramics in any of these structures, nor are the middens in association. This suggests that whatever activities took place within these buildings, ceramics played no role. Together, these conditions would tend to exclude residences as a possibility for the round structures.

Hypothesis 3: Kitchen. Modern Maya stand-alone kitchens tend to be somewhat smaller than residences. Pierreborg (*ibid*) notes that the 11 cases studied ranged between 16 and 30 sq m, and averaged an area of 21.45 sq m. The average area of the round structures in our region averages 14.6 sq m. This is still well below the average size of modern

kitchens. As kitchens contain hearths, the absence of these in our sample is potentially damning. Likewise, the absence of concentrations of ceramics within the structures would argue against the possibility of them being kitchens.

Hypotesis 4: Granary. At present we cannot rule out the granary. At the same time, the absence of direct evidence such as carbonized cobs, or grain are also absent. However, the direct association of *metates* used to grind corn with two of these structures might be considered indirect evidence. Certainly the size range for modern granaries from Xbilincoc (Pierreborg *ibid,* Table 17) of between 7 and 11 sq m is consistent with the size range for our CRAS sample.

Significance

If the circular structures are indeed foundations for granaries, we must ask what the Maya used for storage prior to the Post-Florescent. Some *chultuns* cut into the bedrock have been documented in our research area. Bearing in mind that their true numbers are likely underrepresented due to their low visibility, they still do not come close to the volume necessary to support even modern population levels. This means that, as many Maya still do today, the ancient Maya would have stored their grain in one end of their houses. If this were the case, what prompted the development of a separate granary? I speculate that this might have something to do with the nature of the design of the residences during the Post-Florescent. Perhaps the absence of a front wall made storage within the residence impractical. Circular foundation braces made of uncut stone have been recorded elsewhere in the Northern Lowlands at the sites of Sayil (Tourtellot and Sabloff 1994:81), Xuenkal (Alonso Alvera 2013), Yaxuna (Shaw 1996:31), Pixoy (Burgos and Palomo 1984:26), Naranjal (Lorenzen 1995:75), Cobá (Benevides and Manzanilla 1985:72), Uomuul and Magarita Maza de Juarez (Harrison 1979:194-196), and San Gervasio (Sierra Sosa 1994).

With the exception of a few shrines, the only new constructions dating to the Post Florescent phase of the Terminal Classic would be houses and ancillary structures associated with a non-elite population. Many of the institutions that had defined the Classic period like divine kings and their supporting institutions (erection of public monuments with writing, the construction of large public works like temples, palaces, and roadways) ceased. This is accompanied by a decline in population and the associated abandonment of many sites. Despite this, 54 percent of the sites occupied in the Cochuah region during the Florescent phase of the Terminal Classic period continued to be occupied during the Post-Florescent. It is unlikely that the CRAS region is unique in this regard, and that other areas of the Northern Lowlands likely also have these kinds of unimposing architecture dating to the Post-Florescent . Across the Northern Lowlands, occupation dating to the Post-Florescent phase might be characterized as extensive rather than intensive.

There is however a great deal of disagreement concerning the scale of the population decline as well as the degree to which sites were abandoned. Those who favor the linear succession hypothesis (Brainerd 1958; Morley 1938; Perez 2005; Smith 1971; Valliant 1935) see a near total abandonment of the Northern Yucatan, with Chichén Itzá ruling in splendid isolation for a period of 200 years following the collapse. In contrast, those who favor a partial or total overlap hypothesis (Ball 1979; Bey et al.1992; Cobos 2004; Lincoln 1986) see Chichén Itzá as one of many of sites which continue to be occupied between the collapse and the Postclassic period.

Clearly, the data from the CRAS project supports the total overlap hypothesis with the attendant continuation of occupation, though in a diminished condition. As more architectural

signatures of the Post-Florescent phase of the Terminal Classic period become identified and become recognized at more sites, we will be forced to reevaluate the scale of the Classic Maya collapse in the Northern Lowlands. Certainly the idea of Chichén Itzá being the last site standing in the Northern Lowlands following the collapse would have to be rejected.

Part 5: Summary and Analysis

Chapter 44: Historic Materials from the 2014 Field Season

Alejandra Badillo

At some of the excavations carried out in this field season, along with Prehispanic pottery and lithics, other materials were collected that belong to a different time period of the history of the Cochuah region. Specifically, the materials come from the excavations at the site named the Fortín de Yo'okop (see Chapters 3-12 this volume). It is noteworthy that some samples also were collected on the surface, as will be specified in tables of materials (glass, stone, metal) which are presented below (Tables 25-27).

These materials are glassware, metal, and faunal remains. Amongst the glass artifacts, the most frequently represented samples are fragments of bottles of different colors, which can be grouped into categories according to their color, such as olive-green (color # 515 + # 1010), green (color 555), blueish-green (color # 590), aqua (color # 402), amber (color # 1040), transparent, and white. This classification was made following Spec-True, as has been used by Ortiz (2007) to standardize the analysis of historical bottles (Figure 381) (V_Op10_Niv2_Lote1_v1). The color along with the shape and other attributes suggest the production method, date, and function of the bottle (Ortiz, 2007: 41).

Transparent bottles dates from the late nineteenth century. Between 1880 and 1916, the fabrication of transparent glass using manganese as bleach was common, then selenium began to be used until 1930, and later arsenic was used due the high cost of selenium (Baugher-Perlin 1982; Ortiz 2007). In the samples located this season, there are about 40 fragments of this kind of glass (Table 25).

Fragments of green olive bottles (Figure 382) are most common type in the sample, perhaps because the manufacture of this kind of glass has a low cost of production (Ortiz 2007:43). To accentuate the tone during manufacturing process, iron and coal were sometimes added, reaching very dark tones, simulating black glass in one fragment observed in the sample. This kind of glass was the oldest and became scarce by 1850. Forms of these bottles are associated with liquor bottles (*idem*). It is noteworthy that most of the fragments recovered during the 2014 season are pieces of the bottle-body although there is an example of a base-body-shoulder fragment that is useful for observing the production process. Based upon this, the bottle was made with an immersion mold and base with pontil marks of sand (Figure 383).

Within the sample it was possible to observe fragments with other green hues (color 555), colorations that were obtained by the addition of chromium oxide, iron, or copper to the glass. This kind of bottle may have contained alcoholic beverages, such as wine or champagne, evidenced by the decanter presented in some bases. In Table 25, the number and characteristics of glass are specified (Figure 383).

Different manufacturing techniques were observed in the aqua color examples. For instance, some were made with the technique of blowing and modeling. The aqua tone, according to Ortiz (2007), are the oldest fragments in several historical collections. Although for our sample this was probably the case, it seems that their presence in the area would have occurred during the 30-year period when the site was occupied by Mexican federal

Area	Operation	Lev	Lot	Bags	Number	Notes	Color	Type of Fragment	Pontil	Manufacture	Use	Observations
East of the redoubt	III	2	3	1	1	body (fragment)	aqua	Body 3 mm thick				
		3	1	1	1	base of 5 fragments	clear blue	Body 5 mm close to the base. Base round 6.5 cm in diameter. Type, decanter push up 1.6 cm high // 4 mm thick.	sand ?	blown and hand shaped		
					1	base	aqua	Body 4 to 5 mm thick. Base round 6.6 cm. Type, plane with a light push up of 5 mm high.	glass ?	blown and hand shaped		at the base displays a pattern of curve lines, possible made with a pointil.
					5	fragments of body	clear blue	Body 2 and 3 mm thick				
West of the Well	III	1	1	1	1	neck fragment	clear green	Neck 2 mm thick				
					2	fragments of body	transparent	Body 2 to 4 mm thick				
		1	2	1	1	body (fragment)	olive green	Body 3 mm thick				
		2	1	1	1	base fragment	transparent	Body 5 mm thick. Base round 6.1 cm. Type, plane insert 1.7 cm // 5 mm thick.	glass ?			
Bastion SW	10	1	1	1	3	fragments of body	olive green	Body 2 to 3 mm thick				
					2	neck fragments	green	Neck 2 mm thick				
					5	fragments of body	transparent	Body fFrom 1 to 5 mm thick				
					1	base fragment	aqua	Base round. Type, push up	sand?			
		2	1	1	3	fragments of body	transparent	Body from 2 to 4 mm thick //possibly 6.2 cm diameter		mold		
					4	fragments of body	amber	Body plan of 2 mm thick. Base rectangular, round corners?				
					1	end-incomplete	green	Finished crown top of 1,8 cm tall // of 2 to 6 mm thick				
					3	fragments of body	olive green	Body from 2 to 6 mm thick				
		2	2	1	1	body (fragment)	olive green	Body 2 mm thick				
					1	body (fragment)	dark green	Body 3 mm thick				dark tone is associated with older bottles
					2	body (fragment)	white opaque?	Body 2 to 3 mm thick				possible silex of Prehispanic period, is whitish and translucent
					6	body (fragment)	transparent	Body 2 to 3 mm thick				
					1	end-incomplete	transparent	Finished crown top of 1.9 cm tall // 2.9 cm exterior diameter // 4 a 5 mm thick		industrial production		mark of a mold at the end
		3	1	1	1	body (fragment)	green	Body 3 mm thick				
					1	body (fragment)	transparent	Body 4 mm thick				
					1	body (fragment)	amber	Body 2 mm thick				
		3	4	1	1	body (fragment)	transparent opaque	Body 4 mm thick				
Bastion SE	11	1	1	1	2	fragments of body	olive green	Body 3 to 4 mm thick				
					1	neck fragments	aqua	Neck 3 mm thick				
					1	fragments of body	transparent	Body 2 mm thick				
		1	2	1	1	body (fragment)	olive green	Body 2 mm thick				
					1	body (fragment)	transparent	Body 1 mm thick				
					3	body (fragment)	aqua	Body 2 to 5 mm thick				
		1	2	1	2	body (fragment)	clear olive green	Body 4 mm thick				
					2	body (fragment)	aqua	Body 2 to 3 mm thick				
					1	body (fragment)	transparent opaque	Body 6 mm thick				
		1	3	1	2	fragments of body	dark green	Body 4 to 7 mm thick				
					2	fragments of body	amber	Body 2 mm thick				
					3	fragments of body	transparent	Body 2 mm thick				has bubbles in the interior part of the body
		2	1	2	1	body (fragment)	opaque amber	Body 3mm thick				
					1	body (fragment)	olive green	Body 2 mm thick				
					2	body (fragment)	transparent	Body 1 to 2 mm thick				
					22	fragments of body	olive green	Shoulder 1 to 2 mm. Body 1 to 2 mm thick		fragment of shoulder with mold of immersion		
					10	fragments of body	olive green	Body 2 to 5 mm thick				
					1	fragments of body	transparent	Body 3 to 4 mm thick				
		1	1	2	1	end-neck incomplete	olive green	Finished grooved inner ring 1.7 cm 2.6 // d-d + 2.8 cm // // 6mm thick 1.9 cm high. Neck minor than 2.6 cm, increases d + 3 cm to 4 cm long // 4 mm thick				at the junction of the termination with the neck, melting glass is observed

Area	Operation	Lev	Lot	Bags	Number	Notes	Color	Type of Fragment	Pontil	Manufacture	Use	Observations
North of N2/W1-2	12				16	neck fragments	olive green	Neck 4.6 more than 4 mm thick		fragment of shoulder with mold of immersion		
					1	Base of 6 fragments	olive green	Body straight 5 mm. Base round 6.3 cm in diameter. Type decanter push up 1.3 cm high.	sand	blown and hand shaped	wine	presents a wavy line near the base suggests the growing of the glass during the manufacturing process
					5	bodies	olive green	Body 3 mm thick		mold of immersion		only one fragment (joinnt of the base of shoulder with the body) shows traces of the type of mold used for the production
		2	2	1	5	fragments of body	transparent opaque	Body from 2 and 3 mm thick		mold of immersion ?		one fragment shows mold marks
					2	shoulder fragment	olive green	Shoulder 2 mm thick				
					1	base-body-hombro incompleto	olive green	Shoulder 2mm thick close to body 3 mm to thebase of the neck. Body 3 to 4 mm thick. Base round 6.2 cm. Type, decanter push up 1.6 cm high.	sand 4 cm in diameter	mold of immersion	wine ?	mold mark on the base shoulder (joint of shoulder with body)
East of the excess	13	1	1	1	1	fragments of body	olive green	Body 2 mm thick		mold of immersion	wine ?	a line is observed at the base of shoulder and at the junction of the body
					1	fragments of body	green	Body 3 mm thick				
					1	fragments of body	amber	Body 1 mm thick				solarization?
					2	fragments of body	transparent opaque	Body 1 mm thick				
					2	fragments of body	transparent	Body 2 to 3 mm thick				solarization is shown
		3	2	1	1	fragments of body	transparent	Body 3 mm thick				solarization?
Northeast of S1E1-4/East of N1W1-3	14	2	1	1	1	neck	aqua	Neck 7.2 cm high, 2.5 cm more than 3.7 cm in the middel, 3.6 cm more than 4 mm thick. Shoulder 5 mm thick.		industrial production		
					1	neck incomplete	amber	Neck 5 mm thick				
	15	1	1	1	3	end // neck // shoulder	amber	Finished crown top of 11.9 cm tall // 4 a 5 cm thick mm thick. Neck 4 mm thick. Shoulder 4 mm thick.		blown and hand shaped	beer	no trace of merger between the end and the neck
NE & S sectors	Superficie			2	1	bottle c/end incomplete	aqua	Finished ring or oil. Neck 11 cm high, 2.7 cm less than 6.3 cm, more than 4 mm thick. Shoulder faint. Body straight, 11 cm high. Base round 6.6 cm. Type, plano insert, 6 mm.		blown and hand shaped	beer, brandy or oil	the diameter of the base varies somewhat, is not homogeneous
					2	base c/body y neck	aqua	Neck 12 cm high, 2.9 cm less than, 6.3 cm more than, 4 cm thick. Shoulder faint. Body straight 11 cm high. Base round 6.5 cm. Type, push-up 7 mm.	sand 3.6 cm in diameter	blown and hand shaped		base has a faint push-up
						base c/body y neck incompleto	transparent green	Neck 10 cm high, 3.3 cm less than, 7.1 cm more than, 5 mm thick. Shoulder faint. Body straight divergent, 10.5 cm high. Base round, 6.3 cm. Type, push-up 6 mm.	sand, 4.5 cm in diameter	mold of immersion		thick transparent wall, shown a connecting line at base of the neck
					2	base-body-shoulder	transparent green	Shoulder 4.9 cm high, 4 mm thick. Straight body. Base round 6.5 cm. Type, plane insert 8 mm.		blown and hand shaped		bubbles are observed, the bottom is uneven, body is rugged in the exterior, near its base
						Base-body-shoulder	transparent green	Shoulder 4.9 cm high, 2 mm thick, straight body. Base round 6.4 cm. Type, plane insert 8 mm.		blown and hand shaped		bubbles are observed, the bottom is uneven, body is rugged in the exterior, near its base
					3	base-body	aqua	Body straight 4mm. Type, plane insert 4 mm. Manufacturing mark, round c/5 dots, 6.6 cm.	sand?	industrial production		mold line is marked along its length
						base-body	aqua	Body straight 4mm. Type, plane insert 4mm. Manufacturing mark, round c/5 dots 6.6 cm.	sand?	industrial production		mold line is marked along its length
						base-body	transparent	Body straight 2mm. Base round 6.1 cm. Type, concave 9 mm.	sand?	blown and hand shaped		bubbles in the body
					1	base	transparent green	Body straight, rough to the base 4mm. Base round 6.5 cm. Type, mixed, center 3mm, 5mm periphery.	glass?	blown and hand shaped		bubbles in the body
					1	cuello c/end	aqua	Finished ring or oil, 1.8 cm inner //d- 2.8 and more than 3.1 cm// 2.1 cm high. Neck 8.7 cm long, less than 2.5 cm, 2mm thick. Shoulder faint.		blown and hand shaped	beer, brandy or oil	no mold marks, fusion is observed between neck and end
TOTAL	162											

Table 25. Historical Glass from the 2014 Field Season

Op	Lev	Lot	Bag	Quantity		Type of item	Color	Observations and dimensions	Time Period
				Total	Specific				
9	1	1	1	71	67	body fragments?		two of them show signs of a elevation in half-round shape, possibly from the lid or base of can	Late nineteenth century
					2	wire		3 mm thick, a little over 30 cm long	Late nineteenth century
					2	Can? Rounded edges		possibly rectangular tin	Late nineteenth century
	1	2	1	4	1	incomplete cartridge (broken top)	brown with green spots	Total high of 52mm. Body 30 mm high and 11 mm in diameter. Base of 13 mm in diameter with marks W.R.A. Co. (at top) 30 W C F (below). The center has a circumference of 5 mm in diameter and one dot at the center point.	Late nineteenth century
					1	bullet with cartridge	pink cartridge	Of 7.8 cm long, cartridge 12 mm as maximum diameter, bullet of 9 mm. Base with marking FN (above), a star at the bottom and one on each side	Late nineteenth century
					2	cartridge holder	surface not rusty, reddish	6 cm long, rectangular shape, 1.5 cm wide and 5 mm thick, bar that holds the cartridges into the rifle	Late nineteenth century
	2	1	2	1	1	unidentified	reddish	fragmento de cuerpo plano de menor de 1 mm, 15 cm de ancho	Late nineteenth century
				1	1	unidentified	reddish	minor piece 1 cm with a red tone, breaks easily, possibly is not metal	Late nineteenth century
10	2	1	1	2	1	plane fragment		4.5 cm long and 1 mm wide, with protrusion (button type) 1 mm in diameter and 5 mm high	Late nineteenth century
					1	flat washer		2 cm in diameter	Late nineteenth century
11	1	2	1	14	13	flat fragments (complement of the tray)	grayish	from 5 to 1 cm wide	Late nineteenth century
					1	nail of1 1/2 inches		head of 2 mm wide (type finishing wire nail)	Clavo después de 1850
	1	3	6 (A-E)	136	4	fragments of a tray (E 1 corner section)		A:slightly curved from 3 to 13 cm long	Late nineteenth century
					21			B: 18 pieces of body 3 bends and rolled, generally 1 cm to 14 cm long	Late nineteenth century
					21			C: 19 slightly curved planes fragments of 0.5 cmm to 13 cm long. 2 fragments show different shapes	Late nineteenth century
					25			D: 25 pieces of 1 to 26 cm of dimension	Late nineteenth century
					65			E:9 edges of 8-38 cm long, 54 flat pieces some with slight curvatures, one body with a fold of 16 cm long and 1 corner	Late nineteenth century

Table 26. Historical Metal from the 2014 Field Season
(continued)

Op	Lev	Lot	Bag	Quantity		Type of item	Color	Observations and dimensions	Time Period
				Total	Specific				
11	1	3	2	36	36	fragments of a tray		2 edge, 2 bodies with curved (corner type), 1 possible base or incomplete edge, 1 curved fragment, 30 planes fragments of 5 mm to 3 cm long.	Late nineteenth century
				121	1	cartridge holder		6.1 cm long, rectangular shape, 1.6 cm wide and 4 mm thick, bar holding cartridges into the rifle	Late nineteenth century
					120	fragments of a tray (1 corner section)		6 diagnoses (edges, base bodies, corners), 104 flat bodies of 5 mm to 2 cm	Late nineteenth century
	1	5	3 (A-C)	62	26	rectangular object? Under tray		A: 15 fragments planes, 7 slightly curved, 4 edges, from 1 to 5 cm long	Late nineteenth century
					5		grayish	B: 5 pieces of 4-8 cm long	Late nineteenth century
					31			C: 26 planes fragments, 2 bends and 1 fold, 2 edges	Late nineteenth century
	2	2	1	63	1	nail of 3 inches		head of 8 mm in diameter, with charcoal remains (located on the stove), 4 mm body	Late nineteenth century
					1	nail of 2 inches		body of 3 mm diameter	Late nineteenth century
					61	fragments of a tray (1 corner section)		some have a slight curvature and other one edge (fold type) // 5 out 61 highlights by its curved shape.	Late nineteenth century
12	1	1	1	2	1	cartridge without bullet	pinkish	55 mm high, 12 mm base, with circumference of 5 mm with center point, measures 9 mm at its smaller diameter,base with marking D. M // 1897 // K	Late nineteenth century
					1	wire		wire bent more than 30 cm long	Late nineteenth century
	2	2	1	1	1	Can? Rounded edges	grayish	rounded corner	Late nineteenth century
13	3	1	1	1	1	wire		3 mm diameter and 5 to 6 cm long	Late nineteenth century

Table 26. Historical Metal from the 2014 Field Season

Op	Lev	Lot	Bag	Quantity		Observations	Time Period
				Total	Specific		
9	1	2	1	1	1	Possible tibia fragment of deer // 3 cm long, 1.2 wide and 1 mm thick	Last decade of the nineteenth century
	2	2	1	2	1	Pelvis (mole? or rodent) // 1.7 cm long, 0.5 mm thick	Modern
					1	Fibula (deer?) // 2.5 cm long, 0.2 mm thick	Last decade of the nineteenth century
		3	1	1	1	End of long bone of bird // 4.1 cm long, 4 mm diameter, 1 cm thickness, at one end measured 1 cm	Last decade of the nineteenth century
10	1	1	1	1	1	Fragment of deer or pig? Cooking traces // 2.5 cm long, 1.4 cm diameter, 3 mm thick	Last decade of the nineteenth century
	2	1	1	8	2	Cattle bones // traces of sawing, 2.9 cm long, 2.1 cm wide, 1 cm thick // 1 traces of cutting of an ax (5.8 cm long and 5 mm thick)	Last decade of the nineteenth century
					2	Swine, with traces of cooking // 2 cm long and 3 mm thick	Last decade of the nineteenth century
					1	Pork rib 2 cm long, 1 cm wide and 5 mm thick	Last decade of the nineteenth century
					3	Unidentified	Last decade of the nineteenth century
		2	1	24	4	Bones? Porcine? // Between 2.8 and 3 cm in length, thickness 2 mm	Last decade of the nineteenth century
					2	Porcine, one with cooking traces // 2 cm long, and 3 mm thick, while the other 5 cm long and 5 to 6 mm thick, cutting can trace ax	Last decade of the nineteenth century
					2	Porcine vertebrae? // 2 and 2.2 cm long	Last decade of the nineteenth century
					2	Fragments of long bone of a deer // 2 cm long, 4 mm thick, 1.3 cm wide	Last decade of the nineteenth century
					1	Rib unidentified // 2.5 cm long, 9 mm wide and 2 mm thick	Last decade of the nineteenth century

Table 27. Historical Faunal Remains from the 2014 Field Season (continued)

Op	Lev	Lot	Bag	Total Quantity	Specific Quantity	Observations	Time Period
					13	Unidentified small fragments	Last decade of the nineteenth century
	3	1	1	3	1	Rib unidentified, 2.9 cm long, 3 mm thick	Last decade of the nineteenth century
					1	Unidentified, 3.4 cm long and 4 mm thick	Last decade of the nineteenth century
					1	Possibly rib of deer, 6 cm long, 1.2 cm wide and 6 mm thick	Last decade of the nineteenth century
		4	1	5	1	Calcined bone 3 cm long, 9 mm thickness	Last decade of the nineteenth century
					2	Ribs, unidentified animal // a 4.6 cm long, 1.2 cm wide and 1mm thick	Last decade of the nineteenth century
					1	Unidentified flat bone of 3.4 cm long and 3mm thick	Last decade of the nineteenth century
					1	Unidentified curved bone // 2.7 cm long 7 mm in diameter and 1 mm thick	Modern

Table 27. Historical Faunal Remains from the 2014 Field Season

Figure 381. Fortín de Yo'okop, Variety of Historical Glass

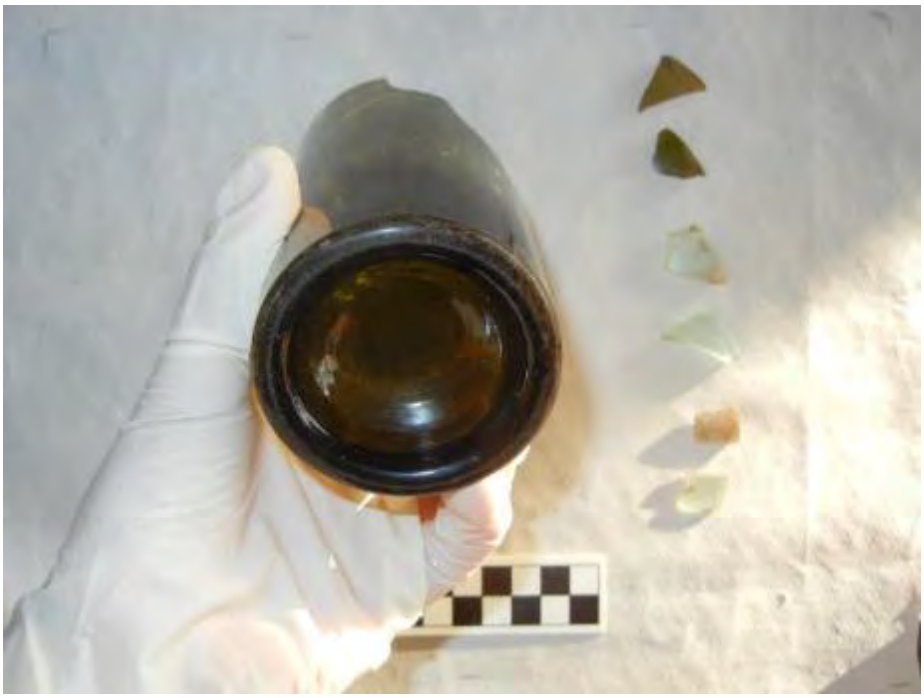


Figure 382. Fortín de Yo'okop, Green Glass Tones

Figure 383. Fortín de Yo’okop, Fragments of Different Shades of Green

soldiers. According to historical accounts, this settlement was in use during the last years of nineteenth century and the first two decades of the twentieth century. However, it is probable that these bottles were manufactured earlier and were consumed by the members of the military occupation.

Such fragments were collected both at the sites of Puesto Militar La Aguada and at Fortín of Yo'okop, like those found in Operation 8 (Figure 384). Fragments that show traces of industrial production that are the latest of the sample (Figure 385); however, they predate 1920, as after that date the production of aqua tone glass became scarce, due to the rise of the use of clear bottles. It is noteworthy that the color aqua resulted from iron impurities found in most sands (Ortiz 2007: 45).

Amber fragments belong to bottles having alcoholic beverages, but they may also have been used to contain other cosmetic and medicinal products. When these pieces have bubbles, it is an indicator that are older. In the case of the items found at Fortín Yo'okop, we know that many of the bottles were of industrial manufacture, as evidenced in some examples found in 2012, which had at the base of their shoulder several letters indicating the date of 1911. To achieve the color, during the process of production, nickel, iron, coal, and manganese were added in large quantities. This type of glass color was very common from 1890 onward (*ídem*: 47). Notably, in the sample obtained during the 2014 season, three fragments with this coloration were found, located in Operation 10 (Level 2, Lote1) and Operation 14 (Level 1, Lot 1). These examples are part of a bottle-body plane; the base was probably rectangular, with the presence of rounded corners (Figure 386).

Glass fragments of other colors such as blue and white were also located, although in minor proportions. Among these, a light blue example (color # 430) was located. Typically, this type of bottle color is associated with cologne or bottles of non-alcoholic content, such as sodas and carbonated waters of American origin (*ídem*: 45). This clear blue hue is produced by adding, in smaller proportions, cobalt oxide or copper to the mix of glass (Figure 387).

Other recovered fragments look like a white glass; however, they could also be an opaque glass. Therefore, additional comparative analyses are needed to define this type. If they were white glass, they could have been used in bottles containing products for aesthetic use (lotion, cream, etc.), which has generally been associated with them (Ortiz, 2007: 49). This type of glass is also known as milk glass, which is produced by adding tin oxide, zinc, horn, or animal bones. However, because of its poor preservation (Figure 388), it was not possible to identify its shape, as part of the body of the bottle.

Regarding metal artifacts, one of the most representative objects located in this season was a metal tray, which presumably had a culinary use. This piece measures 50 cm long by 30 cm wide roughly. While this piece was found *in situ* on a bonfire (see Chapter 8 this volume), it was poorly preserved, as it was totally fragmented. However, because it was located *in situ*, it was possible to obtain its original shape and dimensions.

According to this finding, along with the information obtained from the excavation context, it has been interpreted as the south wing of the Fortín of Yo'okop may have functioned as area for eating (dining room) and/ or food preparation. However, in other areas the remains of cans, such as those found in the Operation 1 (Badillo, 2012) or in Operation 9 (see Chapter 6), have been located (Figure 389).

In addition, in the bonfire remains included several pieces of charred wood that

Figure 384. Fortín de Yo'okop, Examples of Late Aqua Glass

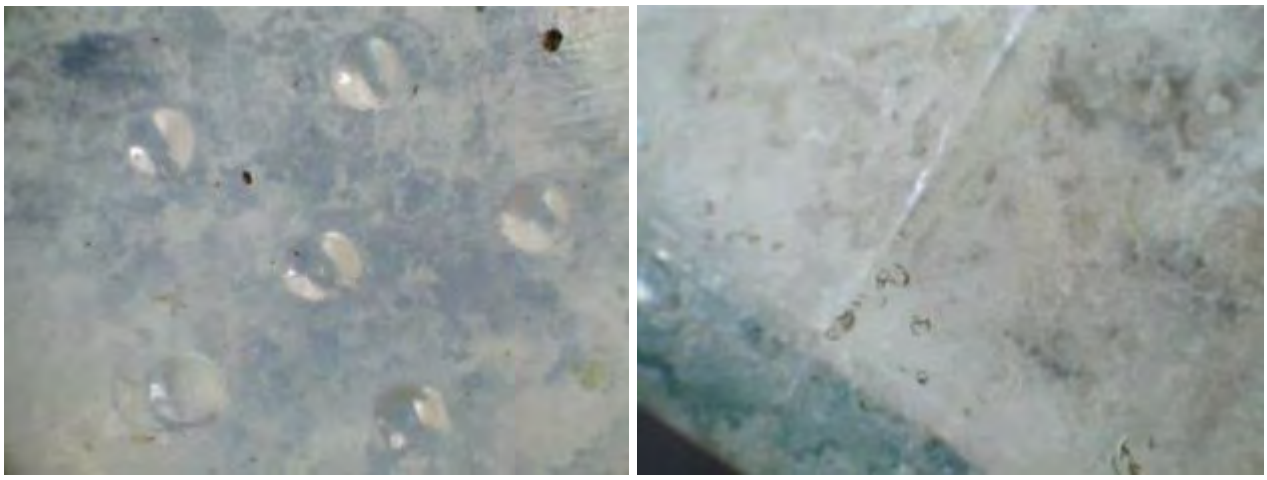


Figure 385. Fortín de Yo'okop, Marks of Industrially-Produced Glass

Figure 386. Fortín de Yo'okop, Examples of Amber Glass

Figure 387. Fortín de Yo'okop, Clear Blue Glass

Figure 388. Fortín de Yo’okop, Opaque Glass

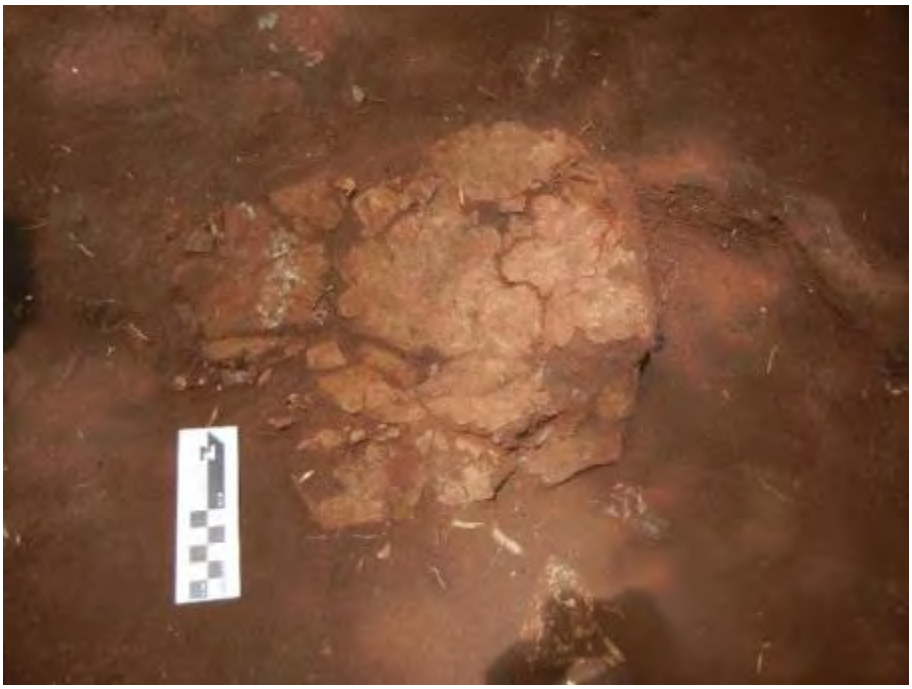


Figure 389. Fortín de Yo’okop, Metal Tray *in situ*

indicate parts of activities conducted prior to when the place was abandoned. The finding of a nail in the remains of the bonfire suggests that the soldiers kept the fire going using recycled wood, which brings up questions about the amount and type of supplies and resources that these military garrisons had (Figure 390).

Above this bonfire, a fragment of metal sheet was located, right beneath the tray. This metal sheet also was poorly preserved and was quite fragmented. Other metal objects located this season were fragments of wire (Table 26), which may have been used in the telegraph network that was laid during the military campaign. However, these artifacts still need to be cleaned and analyzed in order to observe the properties of the metal, as well as to investigate further aspects that could indicate its possible function.

During excavations in Operation 2 (2012) and Operation 12 (see Chapter 15), three example of ammunition were located, a pair were just the case while other had the bullet. This ammunition is from different countries of origin (Figures 391 and 392). It was possible to identify the origin of each one of these artifacts due to the markings present at their bases. At one of these had inscribed the initials of "W.R.A C. // 30 W C F", which indicates that it came from the company Winchester Repeating Arms & Co. Such ammunition was used in Winchester rifles, specifically an 1894 model. One of the cases of ammunition had the mark "D. M // 1897 // K", indicating that it was produced in Deutsche Metall Patronenfabrik, Karlsruhe Germany, in 1897. This kind of ammunition was used in Mauser rifles.

Overall, there is still much to learn from these artifacts. For this reason, further analyses will be conducted, including a detailed cleaning of these pieces to observe other brands that help us to broaden the knowledge of the history of these objects. It is noteworthy that we may find markings indicating the reuse or other indicators of its date of fabrication. All this information will help to formulate new interpretations about the context where these pieces were located.

This also applies to other items related to firearms, for example, with the cartridge holders that are introduced into the rifles. Examples of these objects found during excavations so far (Table 26) are all in very poor condition, quite eroded and badly corroded. These artifacts were not cleaned in the field lab because their condition, but they must be cleaned in the near future. This process may reveal the marks of manufacture and/ or possible dates of manufacture, which may be at the center of each of these artifacts (Figure 393).

There was a great variety of faunal remains found in the excavations. While some examples show rodent gnaw marks, others have use wear associated with the preparation of food, giving some information about the diet of the soldiers.

Among the bone fragments located this season (Table 27), those that had fractures caused by human actions, such as marks suggesting cuts (postmortem), stand out. These were presumably made with metal tools, possibly with some kind of saw or an ax with which the pieces of meat were separated and prepared from the selected animal to be part of the food of the soldiers of the troops. Similarly, other bone fragments show signs of having been subjected to the action of fire; therefore, it is inferred that the animals were cooked (Figure 394). All this evidence together provides insights into the cuisine and the diet that the soldiers who took part in the Military Campaign of Yucatan had. Troop food concerns were very important, not only in terms of nutritional content, but

Figure 390. Fortín de Yo’okop, Nails in Piece of Burned Wood

Figure 391. Fortín de Yo’okop, Ammunition from Winchester Repeating Arms & Co.

Figure 392. Fortín de Yo’okop, Cartridge Deutsche Metall

Figure 393. Fortín de Yo’okop, Cartridge Holder and Cartridge

Figure 394. Fortín de Yo’okop, Cut marks on Faunal Remains

also because they tells us about the circumstances and conditions under which the soldiers were fed, which had a direct impact on their performance in military operations (Krebs 2008).

It is believed that economic, political and social conditions within each one of the military posts were different and had peculiarities. Regarding the Fortín of Yo'okop, according to the excavations so far (see Badillo, 2012; Huerta 2012), we know that beef, pork, venison, and birds were consumed (Table 27). In addition, there is also evidence that the soldiers ate a variety of canned and bottled products, which entered in the area through formal trade and, in many cases, through informal exchange with persons who took advantage of the situation to sell food and goods to the troops.

According to Krebs (2008), eating well and eating a sufficient quantity was a privilege of only the upper classes and some high-status figures within the army. Farmers almost always suffered from poor diets and most recruits for the troops came precisely from those rural populations. In this sense, the evidence of a troop kitchen can help us get closer to these dietary practices and learn the way of life of these soldiers.

Overall, all artifacts found in the 2014 season give us more evidence of what the daily life at the fort was like, which leads us to wonder about the people who lived there. However, for now there are more questions than answers about the complex social dynamics that took place in this settlement.estions than answers about the complex social dynamics that took place in this settlement.

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