Part IV: Return to the Hershey Site
Chapter 9
Passageway From the Main Plaza of Group A to the East Plaza (Operation 54)

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The 2003 field season marked the second year of investigation at the Hershey site. Hershey is the largest ancient Maya settlement in the Sibun study area, located in the upper reaches of the river valley. Operation 54 was the focus of investigation in Group A (Figure 9.1), the largest plaza group at Hershey and home to the site’s ruling elite. Previous investigation of Structure 503 (Operation 51) in Group A uncovered a rich midden deposit that appeared to date primarily to the Late Classic period, ca. AD 600-850 (Harrison 2003). A thin layer of ceramic debris representing the Late-Terminal Classic transition was found capping the surface of the midden (López-Varella 2003). The evidence suggested that the elite core collapsed at around the end of the Late Classic period and did not continue to flourish beyond AD 850 like some sites in the middle and lower reaches of the Sibun Valley (e.g. Pakal Na, Pechtun Ha, Cedar Bank, Obispo, and Oshon). Excavations in Group A during the 2003 field season were aimed at 1) clarifying the chronology of the elite core area and 2) determining the nature of the site’s collapse and abandonment. Excavations of Operation 54 shed significant light on the “final hour” of Hershey and present evidence of a violent termination of the site’s elite body that lends further support to the notion of a site center collapse at the end of the Late Classic period.

Overview of Group A Investigations

Group A is a tightly enclosed plaza group that consists of a series of elongated platforms lining the sides of an inner central plaza area (Figure 9.1). Structures 503 and 504 are roughly equivalent in length and line the southern side of the plaza area (referred to as the North Plaza). A small space between the two structures served as a passageway and was the focus of the Operation 54 investigation carried out during the 2003 field season. The narrow passageway permitted access into the principle group from the East Plaza, an outside plaza area where a ballcourt (King, Chapter 10) and a small shrine structure (Harrison-Buck and Buck, Chapter 12) are located.

Operation 54 entailed a broad horizontal exposure of the passageway, which was partially visible on the surface prior to excavation, along with small areas of the North and East Plazas. The unit measured 16 m (north-south) x 3 m (east-west) and was oriented 16 degrees east of north, aligning with the building orientation of Group A (see Figure 1). The unit is divided into four squares (A-D), each measuring 4 m (north-south) x 3 m (east-west). The line of four squares that comprised Operation 54 were laid out with Square A furthest to the north and Square D furthest to the south (Figure 9.2). Due to a large number of trees, Square C was not excavated during the 2003 season.

Excavations revealed two tall, straight walls lining the sides of the passageway that represent the east wall of Structure 503 and the west wall of Structure 504 (Figure 9.3). The length of the passageway measured roughly 9 m long (north-south) and about 1.60 m wide (east-west), equivalent to the width of Structures 503 and 504.

The opening of the passageway is positioned just slightly east of center along the southern side of the North plaza (Figure 9.1). A staircase is located just to the west of the passageway opening and occupies the
central position along the plaza’s south side. The staircase appears to be a later addition constructed on the north side of Structure 503 that leads to the top of the platform structure. Structure 501, a large stone pyramid in Group A, abuts the southern side of Structure 503. The interface of Structures 501 and 503 was revealed during the excavation of Square D in Operation 54. The surface topography suggests that another staircase may exist on the north side of the pyramid that enabled access from Structure 503 to the rooms partially exposed toward the top of Structure 501.

![Site map of Group A at Hershey, showing the location of Operation 54.](image)

Group A appears to have been built primarily of stone masonry construction. Previous investigations of Structure revealed a series of plaster floors inside the platform structure associated with four distinct phases of construction 503 (see Harrison 2003). The exterior of Structure 503 contained nicely cut limestone facing blocks and a limestone and river cobble core construction fill, indicative of formal Maya platform construction found at many large Classic centers. The northern side of Structure 503, facing the enclosed North Plaza, contained several terraces and a nine-course high exterior northern wall with a
nicely preserved basal molding positioned along its base. The surfaces of the walls and stairs were once covered in plaster and remnants of a formally prepared plaza surface suggest that the central plaza area was entirely paved. The construction techniques at Hershey differ significantly from other sites in the Sibun Valley where plaster is limited and platforms are comprised of a packed earthen fill with stone restricted to terrace retaining walls.

The following provides a review of the construction phases that were identified during the 2003 excavation of Operation 54. A detailed description of the individual zones defined in each square follows an overview of the excavation techniques that were utilized during excavation.

Architecture & Construction Phases

Excavations of Operation 54 aimed to clear down the thick layer of collapse debris that existed within the passageway and expose its surface, along with the associated exterior floors in the North and East Plazas. One goal of excavation was to expose any terminal debris lying on the latest floor surfaces to better understand the final episode of the site’s history. In addition, excavations aimed to reveal any earlier phases of construction to clarify the overall chronology of Group A.

At least four phases of construction were identified throughout the excavation of Operation 54. Plaza Group A appears to have been built over a slightly modified earthen layer or alluvium naturally deposited over an old riverbed of sand and cobbles. During the first phase of construction, an initial plaza floor was laid down over a 5-10 cm thick ballast fill layer comprised of small river cobble and gravel fill. This initial floor (Floor 4 in Square A and Floor 3 in Square D) was constructed of finely-made plaster that runs underneath the final construction phases of Structures 503 and 504 and appears to pre-date this final architectural phase. As noted earlier, investigations into the interior of Structure 503 in the 2001 season revealed at least 4 floors representing multiple phases of construction and it is conceivable that this initial floor surface links up with one or more of these earlier phases of construction deeply buried beneath the interior of the platform. Further investigation of Structures 503 and 504 is necessary to determine whether any form of a passageway existed during an earlier phase of construction.

Phase 2 is defined as the final construction phase of Structures 503 and 504 where the outer walls of these structures were constructed and the 1.60 m wide passageway was formed. The same floor surface continued to be used in the North and East Plazas and functioned as the floor inside the passageway between the two structures.

Phase 3 saw two major architectural modifications, referred to as 3a and 3b. The initial modification, Phase 3a, was the construction of an elevated (35 cm high) corridor surface within the passageway that was built between the two structures. Modifications also comprised a new plaster floor (Floor 3) in the North Plaza (seen in Square A) that abutted the north side of Structure 504, but did not run underneath the structure like the earlier floor. Similarly, another floor (Floor 2) was constructed in the East Plaza (seen in Square D) that abutted the south side of Structure 504, but did not run underneath the platform. Additionally, a staircase was constructed on the south side of Structure 504, located just to the east of the passageway entrance.

During Phase 3b, a small portion of the Floor 3 in Square A appears to have been cut and repaired at this time. A thin strip of the floor was found in-filled with a pink marl construction fill, distinct from the
surrounding white, nicely preserved plaster floor. This patched area of the plaza floor was found just to the north of the passageway step in Square A. In addition, Phase 3b witnessed some additional modification to the northern facade of Structures 503 and 504, as well as the eastern side of Structure 501, with a basal molding added to the base of the exterior walls. No evidence of a basal molding was found inside the passageway on the east and west walls of Structures 503 and 504. This exterior element was identified along the northern wall of Structure 503 during the 2001 investigations of Operation 51 (see Harrison 2003). Both Structures 503 and 504 also appear to have a series of shallow terraces built toward the top of each platform. The findings indicate that the two structures may have mirrored one another in architectural style when looking at the buildings from inside the North Plaza.

In the fourth phase of construction (4a) the exterior floors were refurbished in the North Plaza (Floor 2) and East Plaza (Floor 1). Both plaza floors covered about half of the one-course high basal molding. During a final modification (Phase 4b), the floor appears to have been partially resurfaced in the North Plaza. Floor 1 covered only a portion of Floor 2 along the north side of Structures 503 and 504. The construction may have been in conjunction with the construction of a staircase built on the north side of Structure 503 in this final phase. Phase 4b in Square D may also have witnessed a minor resurfacing event when a small, 2-course high rectilinear construction (possibly a small shrine) was added to the east side of Structure 501.

Artifacts recovered from all four phases of construction appear to correspond primarily to the Late Classic period. No Formative material was identified. The multiple phases of construction and associated artifact assemblage suggest an elite occupation in Group A that may have lasted several centuries, perhaps extending throughout the Late Classic period (ca. AD 600-900).

**Excavation Techniques**

In an effort to glean a maximum level of information, one hundred percent of all soil excavated was screened through a quarter-inch screen, with the exception of a portion of collapse debris in Zones 1 and 2 where only 50% of the dirt was screened due to the paucity of artifacts recovered in these two zones. Trowels were primarily used in the excavation, with picks and shovels only being used to remove dirt and large stones from the heavy overburden of collapse that filled the interior of the passageway. Trowels (and dental tools when necessary) were utilized to define the surface of architecture and *in situ* deposits. Excavation removed levels of sediment in the context of defined zones within the individual squares that measured 4 m (north-south) x 3 m (east-west). Any changes in zone size are noted in the zone descriptions.

Only the topsoil and collapse debris overlying all three squares (A, B, and D) was excavated with the same zone designations (see Zones 1-4). Otherwise, zones in Squares A and B do not overlap with Square D. Any links in construction sequences between squares are noted. Descriptions of zones are found under the associated square in which they were excavated. Zones in Squares A and B, contiguous units which sometimes shared zone designations, are discussed in one section below, followed by a separate section that describes the zones defined in Square D.

Two datums were used throughout excavations. Datum 1 was used for all elevation measurements for Squares A and B and Datum 2 was used for elevation measurements in Squares C and D.
Overview of Operation 54: Squares A and B (North Plaza)

Square A exposed the northern end of the passageway and a low step that effectively elevated the interior passageway by about 35 cm during the final phase of construction (Figures 9.2 and 9.4). In addition, Square A defined the northwestern corner of Structure 504 and the northeastern corner of Structure 503, along with the eastern edge of a central staircase flanking the northern side of Structure 503. The western side of this staircase was defined in Operation 50 in Square A during the 2001 season (see Harrison 2003). Square B, abutting Square A to the south, exposed more of the passageway interior and defined two nicely preserved passageway walls representing the eastern and western walls of Structures 503 and 504, respectively. The following provides the details of excavation by zone for Squares A and B, grouped together by construction episode beginning with the latest architectural phase.

Phase 4

Zone 1

Zone 1 consisted of a thin humic layer and loose tumble debris with a high density of limestone material lying on and just below the surface in Squares A and B. The tumble ranged in size from boulders as large as 50 cm long to small gravel-size inclusions about 2 cm in size. Many of the boulder-size stones recovered in the collapse debris were cut facing stones that represent collapse from the exterior facades of Structures 503 and 504.

The zone was approximately 10-20 cm deep in Square A, where most of the excavation is off-mound. In the southern end of Square A and into Square B the surface of the mound slopes sharply upward. In Square B, Zone 1 measured over 75 cm below ground surface at the deepest point. This deep portion of the zone was inside the passageway where a large amount of collapse debris had filled the interior corridor. The two parallel walls that defined the passageway (the east wall of Structure 503 and west wall of Structure 504) were partially visible on the surface prior to excavation standing roughly 1.6 m apart.

While excavations in Zone 1 in Square B cleared a substantial portion of the collapse debris within the interior of the passageway, only a thin layer of loose rubble and organic debris was removed from the rest of the square. In the northwestern corner of Square B, the surface of the platform of Structure 504 was relatively intact at the modern ground level and only a small amount of debris was removed from this area. Excavations outside of the passageway also revealed a possible terrace edge running north-south on Structure 504, exposed at the base of Zone 1 and drawn on the final planview map (see Figure 9.2). This terrace appears to corner along the southern edge of Square A, mirroring the configuration of Structure 504’s outermost north and west walls.

Only 50% of all dirt removed from Zone 1 in Squares A and B was screened due to the overall paucity of artifactual material. A drilled river cobble was found in the southwest corner of Square B near the surface of the unit, positioned along the top of the eastern wall of Structure 503. The drilled river cobble measures 23.5 cm long, 13.5 cm wide, and .5 cm thick with a diameter of approximately 5 cm and possibly functioned as a hole for a curtain rod within the passageway wall.

Although Square C was not excavated during the 2003 season, the tumble on the surface was sketch-mapped and a surface find of one pottery sherd was collected.
Figure 9.2. Plan view of Operation 54, showing Squares A-D.
Zone 2

Zone 2 was much lighter and more orange in color than Zone 1. The zone was characterized as tumble, packed with limestone boulders, cobbles, and gravel-size inclusions in a clay-filled matrix. Most of the larger inclusions were finely cut limestone that represent collapsed facing stones from the walls of Structures 503 and 504. Less than 10 cm of dirt was removed from the off-mound area in the northern end of Square A where a relatively thin layer of collapse debris overlies the plaza floor. The zone was significantly deeper in the southern end of Square A where the unit interfaces the passageway and northern walls of Structures 503 and 504. The zone in Square A covered the entire square with the exception of an area in the southeast corner where the remains of the northwestern corner of Structure 504 was encountered at the base of Zone 1. In this southern end of the unit, between 40 and 85 cm of collapse
debris was removed. In Square B, where the unit was entirely on-mound, the zone was restricted to the interior of the passageway, measuring approximately 1.60 m east-west (roughly the width of the passageway corridor).

Only 50% of all dirt was screened and excavations continued to yield a light density of artifacts. The artifact density in Zone 2 was slightly higher than Zone 1. However, the depth of the zone also increased and therefore more cubic meters of dirt were removed. One mano fragment was found in the top portion of Zone 2 of Square A, close to another fragment of ground stone that was collected at the base of Zone 1 in Square A. Both appeared to be pink granite, a resource that was locally available in the Sibun gorge and transported down river in the form of sizeable boulders and cobbles.

Figure 9.4. Northern entrance of passageway, looking south from the North Plaza.

Only 50% of all dirt was screened and excavations continued to yield a light density of artifacts. The artifact density in Zone 2 was slightly higher than Zone 1. However, the depth of the zone also increased and therefore more cubic meters of dirt were removed. One mano fragment was found in the top portion of Zone 2 of Square A, close to another fragment of ground stone that was collected at the base of Zone 1 in Square A. Both appeared to be pink granite, a resource that was locally available in the Sibun gorge and transported down river in the form of sizeable boulders and cobbles.
In Square B, a concentration of human bone was found around the northeast corner of Zone 2 toward the base of the zone. Additionally, a worked animal bone also was found toward the base of the zone from the central area of the zone in Square B. A similar worked specimen was found in Square D. Zone 2 ended arbitrarily. At the base of the zone, a good portion of the eastern stairside was revealed along the western edge of Square A, along with more of the northwestern corner of Structure 504. In Square B, the eastern and western walls of the passageway were further exposed.

**Zone 3**

Zone 3 consisted of tumble debris, continuing from Zone 2. The matrix was a semi-compact, clayey soil with a high density of limestone boulders, cobbles, and gravel inclusions that have fallen from the surrounding structures. The walls discussed in Zone 2 were further defined through the removal of a large quantity of tumble in Zone 3 in both Squares A and B.

During the excavation of Zone 3 in Square A, the northern doorway of the passageway (Figure 9.4) was exposed in the southern end of this square. A low step was defined at the northern opening of the passageway, elevating the interior corridor about 35 cm above the surrounding plaza area. A portion of the elevated passageway surface (Zone 7), measuring roughly 165 cm wide (east-west) x 120 cm (north-south) was exposed in Square A at the base of Zone 3. Knowing the location of the elevated surface that extended 4 meters further to the south in the passageway, the last 15 cm of tumble directly over the passageway floor surface in Square B was excavated separately as Zone 5. The debris was removed separately in an effort to isolate any terminal debris left on the corridor surface. Likewise, in Square A the last 5-10 cm of tumble directly over the outside plaza surfaces also was excavated separately (see Zone 4 below).

A spike in artifact density was noted toward the base of Zone 3, around 10-15 cm above the floor surfaces of the plaza and passageway in Squares A and B. The area outside the passageway in Square A yielded a heavier artifact density than Square B. The most notable finds from Zone 3 were clusters of human bone identified toward the base of the zone in Squares A (N=453 fragments) and B (N=10 fragments). The human remains were located beneath the last of the large stone tumble, beginning about 10 cm above the plaza floor. Concentrations of bone were grouped together, labeled, measured with elevations, and removed as separate groups of bone in foil packets. Some of the bone was point-plotted in planview (see Figure 9.2).

The ten bones lying directly on the floor of the northern end of the passageway included fragments of long bone and the top portion of a human skull, along with fragments of a mandible. The skull may belong to a juvenile based on the small size of the cranial fragments and teeth. The skull was located at the interface of Squares A and B and was removed as part of Zone 5 in Square B (see Zone 5 below).

Within the outside plaza area, the 453 fragments of human bone were recovered from the central portion of Square A, including more fragments of a skull, a large number of human teeth, several vertebrae, and long bone fragments. Some of the teeth are worked and contain evidence of drilling for inlays, suggestive of elite status. Additionally, a shell pendant was found in this area, proximate to the skull fragments, suggesting that personal adornment was associated with the human remains.
Zone 4

Zone 4 consisted of a thin layer of collapse debris, measuring less than 10 cm thick, that lay directly over a poorly preserved plaza floor surface (Zone 6) in Square A. Zone 4 was a continuation of a midden-rich tumble layer encountered toward the base of Zone 3. The matrix contained a higher density of small limestone gravel sized inclusions (0.2 - 1.5 cm) with little to no cobbles or boulders. The loose, pebbly layer of Zone 4 may represent part of the deteriorated remains of the latest plaza floor (Zone 6). Within Zone 4, more clusters of human bone (N=192) were identified, drawn, collected and photographed (see Figure 9.2). The disarticulated human bone was mapped, numbered and collected in discrete clusters. Toward the base of Zone 4, the area in Square A was divided into equal quadrants and bone was collected based on its location in the northwest, northeast, southeast, or southwest section of the square.

Zone 5

Zone 5 was restricted to Square B and, like Zone 4 in Square A, consisted of a thin, 10-15 cm thick layer of sediment lying directly over the passageway floor surface (Zone 7), representing the final layer of collapse. The floor of the passageway was elevated by a two course (35 cm high) step evident in the southern end of Square A (see Figures 9.2 and 9.3)

The goal of Zone 5 was to isolate any terminal debris lying directly on the passageway surface. Although a high density of cultural material was recovered from the base of Zones 3 and 4 over the plaza surface, very little cultural material was found associated with the inside passageway. Artifacts included a chipped stone tool, a single obsidian blade fragment, an archaeobotanical specimen, and a C-14 sample. In addition, fourteen fragments of human bone were found lying on the surface of the passageway. In sum, 669 bone fragments were recovered from Zones 3, 4, and 5 in Squares A and B, isolated to the final 10-15 cm of terminal debris overlying both the elevated passageway floor and the North Plaza floor. The bone concentrations are most dense in Square A, associated with the plaza area, namely in the southern half of the unit in close proximity to the northern structure walls. There was considerably less bone inside the passageway on the corridor floor.

The human bone in Square A appeared very disarticulated and may be in a secondary context. It is possible that the bone material originally covered the interior floor of the elevated passageway (Square B), but repeated rain and flooding activity in the ancient past transported the bone material (and dirt) out of the elevated passageway, north in the direction of the plaza floor. This would explain the 10 cm of fine-grained sediment mixed with dense concentrations of bone above the plaza surface. The findings in the passageway support this theory, where bone was found deposited directly on the plaster floor surface. The evidence suggests that the bone was deposited just prior to the collapse of the structure when the plaza group was still actively being maintained. The central area of the passageway corridor in the southern end of Square B contained little evidence of bone with the majority of the twenty-four fragments found at the far northern end of the passageway at the interface of Squares A and B, further supporting a gradual movement north in the direction of the plaza where the bulk of human bone was found (N=645).

Zone 6

Zone 6 was the latest plaza floor (Floor 1) in Square A that was underlying the Zone 4 midden-rich collapse debris. The floor surface was in a poor state of preservation. However, it appeared that Floor 1 was a localized resurfacing event that may have been built in conjunction with the construction of a staircase
(Zone 31) that was added to the north side of Structure 503 in the final phase of construction (Phase 4b). The white plaster floor surface appeared disturbed in places, containing three different mottled soil colors. A small area directly to the north of the passageway entrance was a lighter, plaster-like floor (10YR 5/3 brown), perhaps the result of a repair to the floor. In the middle of Square A were several dark areas (10YR 3/2 very dark grayish brown) that may represent postholes or pit features. These enigmatic features contained a relatively high density of artifacts. The final soil color difference was identified along the northern wall of the excavation unit. It was dark yellowish brown (10 YR 4/6 dark) and more compact and clayey than the other two soil types. This matrix contained large cobbles.

Only half of the plaza floor exposed at the base of Zone 4 in Square A was excavated, an area measuring roughly 3 m (E-W) x 1.4 m (N-S). The remains of the latest plaza floor are poorly preserved, with the most intact area of floor within the first 80 cm (north) of Structure 504 and the passageway step. Presumably, the collapse debris, heaviest in the areas closest to the structures, effectively preserved this portion of the plaza floor. The tumble directly above the Zone 6 plaza floor yielded a high density of artifacts associated with the floor surface, namely a large quantity of disarticulated human bone (discussed above). The floor, in its best-preserved areas adjacent to Structure 503, measured around 10 cm in thickness. Very little of a smooth plaster surface remained intact. Most of the floor remains consisted of ballast fill comprised of small limestone inclusions, mortared together with slightly larger limestone gravel. In general, the plaster construction at Hershey (even in the ruling residential Plaza Group A) is of relatively poor quality when compared to other Classic period monumental architecture at Maya sites of similar size.

A high density of charcoal was recovered from within the North Plaza Floor 1 construction and a large C-14 sample was collected for radiocarbon dating. Several Pabellon Modeled-Carved ceramic pieces were recovered and a collection of diagnostic reconstructable sherd were also found, including a portion of a pedestal-base pyriform vessel similar to those found in northern Yucatán (see Figures 9.2 and 9.10).

Zone 31

Zone 31 consisted of the eastern side of a staircase that abutted the northern front side of Structure 503. It appeared to have been built during the final phase of construction (Phase 4b), providing access to the top of the platform and the adjacent pyramid (Structure 501) in Group A. At the base of Structure 501 there appears to be another staircase, leading from the platform of Structure 503 to a series of rooms partially visible on the surface at the top of the western side of the pyramidal structure.

The eastern wall of the lower staircase on the northern side of Structure 503 was partially exposed in Square A, but not excavated. The north-south wall of the staircase extended roughly 1.5 m to the north of the exterior platform wall (Figure 9.3a). The eastern stairside was poorly preserved and appeared almost entirely collapsed. The wall of the stairside was built of large, cut limestone blocks. The western wall of the staircase, partially exposed during the 2001 excavation of Operation 51 (Square A), revealed a wall with eight intact courses at its highest point that measured over a meter in height. The eastern side, on the other hand, was not as well-preserved and contained only about three courses of intact facing stone, measuring about 50 cm in height.
Zone 9 was built during Phase 4a, an earlier facet of construction that consisted of a poorly preserved plaza floor (Floor 2) in the North Plaza, located directly below the Zone 6 (Floor 1) resurfacing and above Floor 3 (Zone 10). All floor surfaces were most clearly discernable right along the northern edge of Structures 503 and 504 and to the north of the passageway entrance in Square A (Figure 9.5). The Zone 9 floor partially covered the basal molding at the base of the northern side of Structure 504. Both the Zone 6 and Zone 9 floors appeared to gradually slope down and taper out about 150 cm north of the architecture. Here, they merged with the Zone 10 plaza surface (Floor 3), a nicely preserved plaster floor directly below the Zone 9 floor (see Phase 3a below). Zones 6 and 9 may represent localized floor resurfacings that created a sloping surface, perhaps to more effectively drain water away from the structures and into the plaza. The configuration and surface topography of the North Plaza suggested that water drained out of the northeast corner of the enclosed plaza group through an opening between Structures 505 and 506, where water could move eastward in the direction of the river. Both floors abutted the front facing of Structures 503 and 504 and the step of the elevated passageway, but did not run underneath the architecture, post-dating this earlier construction.

![Figure 9.5 Eastern cross-section of Squares A and B in Operation 54, showing sequence of floors in the North Plaza.](image)

The Zone 9 floor was not well preserved, but consisted of some remnant plaster material and mostly ballast fill. There were flecks of limestone resembling sascab material throughout the matrix of the floor. The ballast fill comprised small, gravel sized inclusions and was more densely packed toward the base of the floor. Only a light density of artifacts was found within the floor fill.
Phase 3

Zone 10

The Zone 10 plaza floor (Floor 3), built during Phase 3a, was excavated only in the southern half of Square A (Figure 9.5). The Zone 10 plaza floor appeared to correspond or slightly pre-date the construction of an elevated corridor in the passageway (assigned to Phase 3b). The floor abutted the facing stones of the passageway step and did not run underneath the length of the corridor like the Zone 11 floor. A thin strip of the Zone 10 floor seemed to have been cut and in-filled with a packed, plaster-like surface, but was pinkish-brown in color as if exposed to burning prior to being laid down. The pink surface extended to the north only about 40 cm in Square A and did not continue beyond the northwestern corner of Structure 504. The pink patch was tamped down and made level with the rest of the Zone 10 floor and may have resulted from the construction of the elevated passageway during Phase 3b for while the Zone 10 floor did not run underneath the elevated passageway, the pinkish-brown patch extended slightly underneath the facing stones of the passageway step (see Zone 24 below). This suggests that the floor pre-dated the step construction, but was probably roughly contemporaneous with this construction episode. Nonetheless, they are sub-divided into Phases 3a and b.

While the Zone 10 floor was built either at the same time or just slightly before the elevated passageway, the Zone 10 floor clearly post-dated the final phase of Structure 503. The floor interfaced the middle of the first course of stones on the northern side of the structure. The floor also appeared to be coeval or post-date Structure 504, although it did run underneath the one-course high basal molding found at the base of the northern wall of Structure 504. The evidence suggests that the basal molding was a later addition (Phase 3b), grafted on to the exterior of this structure. The exterior molding post-dated the Zone 10 floor and may have been added to the building around the same time as the elevated passageway or slightly later.

Excavations of Zone 10 revealed limited remains of intact plaster, only existing in a small area measuring approximately 1 m x 1 m in the western half of the square. Along the eastern side of the square there was little to no plaster preservation, only ballast fill material. The fill was comprised of tightly packed gravel- and cobble-size limestone and river stone that was laid down on a relatively level plain.

The Zone 10 floor contained a large disturbed area in the center of the zone, just to the north-northeast of the passageway entrance. A clear pit feature could not be discerned and after 5-10 cm another plaza floor (Zone 11) was interfaced. Therefore, the disturbed area was not taken out as a separate zone. It is possible that the enigmatic feature represented the bottom of a pit that was dug into either the Zone 6 or Zone 9 plaza floor. A similar location of disturbance was noted cutting into Zones 6 and 9, but the state of poor floor preservation inhibited the clear definition of any cut into these floor levels. Tree disturbance is a possibility. Alternatively, the pit feature may have held a stela or stone monument. A concentration of large slate fragments were found distributed throughout the disturbed area of Zone 10 and may represent the remains of a destroyed slate stela. Similar intact slate monuments have been documented in both the Sibun and adjacent Stann Creek Valleys. It is conceivable that the pit feature was the location of a monument that was later removed. No concentrations of any other artifacts were found associated with the cut to suggest a ritual deposit, although concentrations of sherd fragments were noted in the disturbed areas of the upper zones.
Zones 7 and 25

Zone 7 comprised the floor surface inside the passageway and Zone 25 represented the northern retaining wall of the passageway step (Figures 9.2, 9.3 and 9.4). The construction of the elevated passageway was built during Phase 3b. The two-course high step consisted of large cut facing stones that rested on a pink and brown construction fill layer (Zone 24), which was associated with the Zone 10 floor. Like Zone 10, the passageway construction overlay (and post-dated) the initial plaster floor surface in Group A (Floor 4, Zone 11 in Square A). The wall retained a limestone boulder fill (Zone 23) that was capped with a nicely preserved floor surface (Zone 7). The construction elevated the interior corridor about 35 cm above the original floor (Zone 11) of the passageway. The Zone 25 retaining wall consisted almost entirely of cut limestone boulders with very little soil and only a light density of artifacts were recovered.

The northern step (Zone 25) at the passageway entrance was exposed in the southern end of square A. The Zone 7 floor of the passageway measured roughly 9 m in length, extending south through some of Square A and all of Squares B and C. Although Square C was not excavated, the southern entrance to the passageway was found along the northern edge of Square D (technically about 10 cm into Square C) and another step with facing stones was exposed in this location.

The area of the Zone 7 surface in Square A measured 120 cm (N-S) x 164 cm (E-W). Only a portion of Zone 7 was excavated in Square B that measured roughly 2 m (N-S) x 1.64 m (E-W). The zone consisted of the remains of the elevated plaster floor and an underlying fill layer containing gravel-sized limestone and river stone. The plaster surface was semicompact in density, but most of the underlying fill was relatively loose. There were many voids in the fill, resembling dry-laid construction fill. There was no evidence of mortar, only a loose, light brown and tan mottled soil. A light density of artifacts was found in this zone. However, a number of interesting finds were recovered, including a worked human tooth with a jade inlay that was found around the northeast corner of Square B (Figure 9.11a). Additionally, a small shell tinkler (Figure 9.11b) was found in Zone 7 in the southern half of the zone and a human phalange that appeared to be worked was also collected from the southern end of the square.

Around 5-10 cm below the Zone 7 surface, the limestone and river stone fill increased to cobble-size inclusions. The fill containing larger inclusions (measuring roughly 32 cm long) was removed as Zone 23.

Zone 23

Zone 23 consisted of the construction fill that was the core interior fill of the passageway’s elevated floor surface. The fill was comprised of tightly packed limestone and river stone cobble-sized inclusions, along with significantly larger boulder-sized limestone and river stones. The boulders ranged from 30-70 cm in size. The smaller cobble inclusions filled in the gaps between the boulders. The fill was capped with a layer of “dry laid” cobbles that contained many voids. Artifact density was light. Notably, a ceramic spindle whorl was recovered from the base of Zone 23 in the southeast corner of Square B. A C-14 sample, submitted for radiocarbon dating, was collected and an archaeobotanical sample and a possible speleothem were found.
Zone 24

Zone 24 consisted of a thin layer of fill underlying the Zone 25 step and portions of the Zone 23 boulder fill of the passageway. Together, Zones 23 and 24 make up the construction fill of the elevated floor surface inside the passageway that was retained by the Zone 25 2-course step and capped with the Zone 7 plaster surface.

Zone 24 comprised a brown and pink marl-rich matrix. The pink material was a compact, mortar-like substance that was primarily concentrated underneath the Zone 25 step and appeared to connect with the pinkish-brown patch found in the Zone 10 floor (see above) to the north of the passageway step. Both deposits may have been a result of the step construction. The Zone 24 fill layer extended a bit further to the south underneath Zone 23, but was more brown in color and less compact and tamped down. A similar pink patch resembling the area in the Zone 10 floor was found embedded in the Zone 20 floor that abutted the southern edge of the elevated passageway in Square D, suggesting a contemporaneous construction. In both cases, the pink patch appeared to have been tamped down to make it compact and relatively flush with the surface of the intact plaster floor. In Squares A and D, the pink and brownish-tan surface appeared to run underneath the passageway step. It may indicate that the Zone 10 floor slightly pre-dates the construction of the elevated floor surface (see discussion of Phases 3a and b above).

The pink mortar-like material directly underlying the 2-course wall was about 5-10 cm thick. The mortar-like substance was laid down over an earlier floor (Zone 11) that originally ran from the North Plaza area through the passageway to the East Plaza. The pinkish-brown mortar material is generally more compact than the overlying Zone 23 fill and may have provided some greater stability to the step construction and boulder and cobble fill that was laid down over it. The brownish-tan matrix further to the south tends to be a slightly looser fill material. Together, they make up a thin 5 cm fill layer, relatively devoid of artifacts, that becomes increasingly deeper to the north (up to 10 cm) underneath the Zone 25 facing stones. The matrix contains flecks of marl or decomposed limestone, as well as small limestone inclusions and some river gravel. Artifact density was generally light throughout the zone. In Square A, one piece of worked shell, a possible speleothem, and a C-14 sample were collected. In Square B, another possible speleothem was found and two archaeobotanical samples were collected.

At the base of Zone 24, a beautifully preserved plaster floor (Zone 11) was revealed throughout Square B. Along the northern edge of Square B, the floor appears to have been cut and later capped with a section of plaster flooring, about a centimeter higher than the existing floor (see Zone 26).

Phase 2

Zone 29

Zone 29 represented the east wall of Structure 503 (Figure 9.3a). The northeast corner of this wall was defined in the southwest corner of Square A and extended south down the western side of the passageway and at about 9 meters in length merged with Structure 501 at the interface of Squares C and D. The boundary between Structures 501 and 503 was difficult to discern (Figure 9.6). It was clear that Structure 501 (the pyramid) pre-dated Structure 503. Therefore, the remains of a faced northeast corner of Structure 501 were anticipated. However, the transition was relatively seamless and only a subtle vertical
line at the interface of the two structures could be discerned in the profile of the contiguous walls. The beginning of a one-course basal molding demarcated the interface between the two structures. The molding was restricted to the east side of Structure 501 and did not extend further to the north along the east side of Structure 503 through the passageway. In addition, the interface of the two platforms was clearly demarcated in the surface topography of the two platforms.

![Diagram of Structures 503 and 501 in the East Plaza (Square D).](image)

**Figure 9.6 East wall of Structures 503 and 501 at the southern end of the passageway in the East Plaza (Square D).**

In Square A, the east wall of Structure 503 (Zone 29) rested on the Zone 11 plaza floor (referred to as the Zone 21 floor in Square D). This surface represented the earliest plaza floor of the East and North Plazas in Group A. The construction of Zone 29 clearly post-dated the construction of this initial plaza floor. However, it may be contemporaneous with the construction of the pyramid, Structure 501 (seen in Square D). The best-preserved part of the wall was intact up to ten courses in height (see Figure 9.3a, Square B).

**Zone 30**

Zone 30 represented the western wall of Structure 504 that served as the eastern wall of the passageway (Figure 9.3b). The northwest corner of this wall was defined in the southeast corner of Square A and
extended south down the eastern side of the passageway and at about 9 meters in length the wall cornered to the east (at the interface of Squares C and D). Like Zone 29, the Zone 30 wall rested directly overtop of the initial plaza floor (Zone 11/Zone 21) and post-dated this initial floor construction. About two courses of the east and west walls of the passageway (Zones 29 and 30) were covered over when the elevated passageway surface was constructed.

**Phase 1**

*Zone 11*

Zone 11 was the initial plaza floor that was constructed in Group A and represented Phase 1 of construction (refer to Figures 9.3, 9.4 and 9.5). It appeared to be the original floor of the North and East Plazas of Group A (referred to as Zone 21 in Square D) and was utilized as the passageway floor during Phases 1 and 2 until it was covered over in Phase 3. The plaza floor ran underneath the final phases of Structures 503 and 504 and functioned as the initial passageway surface. Zone 11 consisted of a nicely preserved plaster floor underlying the Zone 10 plaster floor in Square A and was directly beneath the elevated passageway construction. The fill of the elevated passageway effectively preserved the floor surface of Zone 11. The surface of Zone 11 north of the passageway was less well preserved where a ballast fill with small amounts of intact plaster were found. The ballast fill comprised a compact layer of limestone inclusions with some river stone. The floor surface and associated ballast fill of Zone 11 extended 15-17 cm in depth.

*Zone 26*

Zone 26 was a plaster cap that was found superimposed on the Zone 11 floor inside the passageway (Figure 9.3). It appeared to be a repair to the Zone 11 floor for no other associated deposits were found. The plaster cap was discovered when a portion of the elevated passageway construction was removed. The large plaster patch was identified toward the northern end of the passageway entrance. The plaster capping measured roughly 90 cm (N-S) x 160 cm (E-W) and extended the entire width of the passageway (E-W) and ended just 23 cm south of the facing stones of the Phase 3 passageway step. Excavations removed the plaster cap and associated ballast fill. The floor was very compact and consisted of chunks of plaster, marl, and gravel sized limestones tightly packed in a brown colored matrix (10YR 4/6). Very few artifacts were recovered. Larger inclusions and some mottled soils were encountered in the lower half of the zone. At the base of the zone, a river gravel and cobble fill layer was encountered (Zones 27 and 15). The presence of this fill layer indicated that the plaster cap was a repair job to the Zone 11 floor and was not sealing any kind of special deposit.

A large piece of charcoal was collected for C-14 dating, found in the ballast fill of the floor cap. Small concentrations of charcoal and burned limestone were noted throughout the zone, especially evident along the eastern edge of the cut where the zone interfaced the western wall of Structure 504. The evidence suggested some *in situ* burning occurred just prior to or during the construction of the plaster cap that was laid over the cut in the floor.
Zones 27 and 15

Zones 27 and 15 comprised an all-river gravel and cobble fill underlying the Zone 11 floor. The fill layer was distinguished from the ballast fill of Zone 11 by a sandy-clay matrix filled with gravel- and cobble-sized riverstones mixed with the soil. A thin layer of sandy-gravel and river pebbles topped the surface of Zone 27. The large river cobbles and gravel were evenly distributed and formed a fairly level surface. The fill layer was roughly 10-15 cm thick and covered a modified natural earthen layer (see Zone 16 below). The fill layer was exposed in two locations within the excavation unit. One portion was exposed underneath the Zone 26 plaster capping (referred to as Zone 27) and another portion was identified further to the south, directly underneath the Zone 11 floor in Square A (referred to as Zone 15). This fill served as an initial construction fill layer for the Zone 11 plaza floor that ran underneath Structures 503 and 504. The same fill layer was identified in Square D in the East Plaza, but was removed as part of the Zone 21 floor (equivalent to the Zone 11 floor in Squares A and B). The modified earthen layer that underlay this cobble-rich construction fill layer and was exposed in Squares A, B and D, but was excavated only in Square A. A light density of artifacts was recovered from Zones 15 and 27.

Zone 16

Zone 16 was an earthen layer found directly below Zone 15 in Square A that was slightly modified prior to the construction of the initial plaza floor. The matrix consisted of a dark yellowish brown silty-clay soil, which was a distinctive change from the Zone 15 sandy-clay gravel fill layer. Zone 16 continued to produce artifacts, but in very small numbers. The soil became quite compact with few inclusions, with the largest being smooth river gravel that were probably naturally deposited.

Zone 17

Zone 17 was a continuation of the Zone 16 natural earthen layer excavated in Square A. The matrix comprised a silty-clay matrix with few inclusions. Unlike Zone 16, Zone 17 contained a high number of artifacts from the northern half of the square. The soil in Zone 17 was also slightly lighter in color than the Zone 16 matrix. The soil was mottled with a yellow clayey matrix that appeared to be the result of bioturbation (likely root action). Mottled soils with vertical linear patterning may represent past root activity (Bullard, personal communication 2003). The soil around the artifacts was of a more greenish-yellow color. This could indicate that root activity caused the translocation of the artifacts to this depth, rather than being a sign of an earlier occupation at this locale. A C-14 sample was collected at a depth of 337 cm below Datum 1.

Zone 18

Zone 18 was a continuation of the Zone 17 earthen layer, but the area of excavation was reduced to the western half of the unit and measured 1m (E-W) x 1.4m (N-S). The zone was completely devoid of artifacts. There was a higher density of inclusions in Zone 18 than in either Zones 16 or 17, but still a relatively light density of limestone and river stone inclusions. The sterile zone appeared to be a purely natural earthen layer that did not experience any human modification or occupational use, like perhaps Zones 16 and 17.
Zone 19 was a shallow shovel test pit dug into the bottom of Zone 18, toward the center of the zone in Square A. The zone consisted of a natural earthen layer of sand, river gravel and river cobble. The river cobbles were tightly packed with a loose, sandy matrix. Zone 19 may represent an old river bed deposit. It was underlying roughly 45 cm of a compact earthen layer (excavated as Zones 16-18) that may represent an alluvial deposit that accumulated over time from repeated flooding events. While Zone 17 had a small spike in artifacts, Zones 18 and 19 were culturally sterile. The evidence suggested that the top 20 cm of the natural earthen layer was occupied for some time prior to the construction of Group A, although no construction was identified. Limited horizontal exposure inhibits a full assessment of this early occupation. The natural slope of the land appears to have been leveled somewhat in preparation for the building of Group A.

Overview of Operation 54: Square D (East Plaza)

Excavation of Square D exposed the southwestern corner of Structure 504 and the western side of a staircase flanking the southern side of Structure 504, positioned at the far western end of the structure. In addition, Square D revealed the eastern side of Structures 503 and 501, a large pyramidal structure (Figure 9.6). The contact between these two structures was noted during excavation, though somewhat difficult to discern. As noted, previous excavations in 2001 (Operation 50, Sq. F - see Harrison 2003) revealed that Structure 503 contained at least four construction phases so it is possible that the final phase of construction merged these two structures and somewhat obscured the interface. Our division of the two structures was based on upper platform elevations that distinguished the two structures when the site was mapped in 2001 (Morandi et al. 2003). The following provides the details of excavation by zone for Square D, grouped together by construction episode beginning with the latest architectural phase.

Phase 4

Zone 1

As in Squares A and B, the topzone of Operation 54, Square D was a humic layer with a very high density of tumble debris, collapsed from Structures 501 and 503. The sediment graded in color from a brown (10YR 4/3) in the northern reaches of Square D, to a dark yellowish brown (10YR 4/4) in the southeast corner of the square. The tumble, ranging in size from 6 cm gravel to 60 cm boulders, was comprised of riverstones, which acted as construction-fill for Structures 501 and 503, as well as limestone, used as both facing stones and construction-fill. The entrance to the passageway, created by the east wall of Structure 501 (Zone 12) and the southwest corner of Structure 504 (Zone 30), was located at the northern extent of Square D (see Figures 9.2 and 9.7). The western edge of Square D follows the eastern walls of Structures 501 and 503 (Figure 9.6). The excavation of Square D was extended roughly 80 cm north into Square C, in an effort to fully expose the passageway entrance (all artifacts are designated “Square D”). It was during this expansion, that the southwest corner of Structure 504 was uncovered.

Prior to the excavation of Zone 1 within Square D, there were a line of three stones, two courses high, representing the remains of an eastern retaining wall of Structure 501, located in the northern extent of the square. As tumble was removed, it was revealed that the uppermost facing stones of the eastern wall of
Structure 501 had collapsed, leaving behind only construction-fill in their place (Figure 9.6). However, as the excavation of Square D continued (Zones 2, 3, and 4), several courses from this retaining wall were found preserved below. The excavation of Zone 1 revealed the top three preserved courses of this retaining wall. Only 50% of all dirt from Zone 1 was screened, due to the general paucity of cultural material. In total, only five poorly preserved pottery sherds were recovered.

Figure 9.7. Southern entrance to passageway, looking north from the East Plaza.
Zone 2

Like Zone 1, Zone 2 was comprised of collapse debris, but differentiated as a new zone due to a more compact nature and more orange sediment color. The zone was characterized as tumble, packed with limestone boulder, cobble, and gravel-sized inclusions in a clayey matrix. The primary soil color was a dark yellowish brown (10YR 4/4), with secondary areas of dark brown (10YR 3/3) and yellowish brown (10YR 5/4) along the northern wall of Square D. Most of the larger inclusions were finely cut limestone blocks, which represented collapsed facing stones, fallen from portions of Structures 501, 503, and 504. At the base of Zone 2, two additional courses of the east wall of Structure 501 (Zone 12) were uncovered, and the wall was found to run the entire length of the western side of Square D. Additionally, the southeast edge of Structure 503 (Zone 29) and the southwest corner of Structure 504 (Zone 30) were revealed during the excavation of Zone 2 in Square D.

There was a small area of burnt, dark orange clay (60 cm north-south x 95 cm east-west, 20 cm in depth) found midway along the east wall of Square D. This appeared to be the result of the modern burning of a tree root, from any one of the three large trees disturbing the square.

Fifty percent of all dirt was screened as excavations continued to yield a light density of artifacts. Notable artifacts recovered from Zone 2 included elongated “soda straw” specimens and a crystalline rock fragment that could possibly be cave formations. Additionally, a large volume of plaster and mortar fragments was recovered from Square D, which over time, had fallen from the east wall of Structure 501. Excavations have revealed that plaster and mortar were used in the construction of Group A. Several facing stones along the Structure 501 eastern wall still exhibited intact plaster and mortar, while some collapsed boulders also retain plaster and mortar remnants. The plaster and mortar fragments mostly comprised of a very high density of limestone pebble inclusions, and a light density of gravel limestone inclusions with very little fine paste material. Excavation of Zone 2 at the interface of Squares C and D yielded what appeared to be the remains of a monkey, including the radius, ulna, wrist bone, and two phalanges. Zone 2 ended arbitrarily.

Zone 3

Continuing from Zone 2 in Square D, Zone 3 was a tumble layer composed of collapse debris from Structures 501 and 504, though noticeably more compact than its overlaying zones. The matrix was a semi-compact to compact, dark yellowish brown (10YR 4/4), silty clay sediment, characterized by a high density of river cobble and gravel, as well as limestone boulder, cobble, and gravel inclusions. The majority of the limestone boulders and cobbles were cut stones, which had since fallen from the surrounding structures, while the river gravel and cobble were interior construction-fill.

The walls discussed in Zone 2 were further defined through the removal of this large quantity of tumble in Zone 3. At the base of Zone 3, a total of nine courses of cut stone were revealed along the east wall of Structure 501 (Zone 12), as well as several courses of the southeast corner of Structure 503 (Zone 29), where it abutted Structure 501 (Figure 9.6). Additionally, within Zone 3, the southwest corner of Structure 504 (Zone 30) was revealed, along with the side of a staircase (Zone 14). The staircase flanked the southern side of Structure 504, leading from the East Plaza to the top of the elongated platform structure. At the base of Zone 3, three courses of the stairside were exposed.
Along the southern edge of Square D, a linear alignment of four, large limestone blocks were uncovered (Zone 13; Figure 9.8). At the base of Zone 3 this enigmatic structure was 2 courses high. The southern entrance to the passageway (Zone 28) also was revealed in Zone 3. The doorway, measuring 1.64 m east-west, was located between the east wall of Structure 503 and the southwest corner of Structure 504. Like the northern entrance (see Figure 9.4), the southern entrance contained a low, 2-course high step leading up into the elevated passageway (Figure 9.7). Two floors (Floors 1 and 2) are associated with this step construction in Square D and are discussed further below (see Zones 8 and 20).

The most notable finds from Zone 3 were recovered toward the base of the zone, alongside the east wall of Structure 501 in the western half of the unit. The eastern half, on the other hand, was virtually sterile.

Figure 9.8. Southern cross-section of Square D in Operation 54, showing enigmatic stone wall feature, possible shrine structure (Zone 13).

Artifacts from Zone 3 included more “soda straw” specimens and fragments of plaster and mortar from the surrounding structures. Diagnostic pottery emerged from the Zone 3 matrix, including several large
rim and body sherds of several *ollas*. Two vessel foot fragments were recovered that may be indicative of Postclassic occupation. While Zone 3 yielded two biface fragments, only a small amount of debitage was found in Operation 54. Like Squares A and B, a large quantity of human bone fragments were recovered from the southwest and northwest quadrants of Square D, right alongside the east wall of Structure 501. The bone was found in concentrated clusters, but was highly disarticulated (Figure 9.9). A fragment of worked shell was found in the northwest corner of Square D. Though not directly associated with the clusters of bone, it was found at the same elevation, suggesting that it was personal adornment that may have been associated with the bone deposits.

![Figure 9.9. Close-up photo of the disarticulated human bone (Cluster B) in Square D.](image)

Zone 3 ended when a portion of a poorly preserved plaster floor surface (Zone 8) was interfaced in the northeast corner of Square D. There was a lighter density of collapse debris at this level. The last 5-10 cm of tumble lying directly over the outside East Plaza surface was excavated separately as Zone 4.

**Zone 4**

Zone 4 in Square D was the final thin layer of collapse debris directly overlaying the latest plaster floor (Zone 8) in the East Plaza of Group A. The Zone 4 matrix was a semi-compact, dark yellowish brown (10YR 4/4), silty clay sediment characterized by a minimal quantity of large cobble and boulder-sized tumble debris, and a high density small, gravel-sized limestone inclusions. The increased density of
pebbley limestone inclusions encountered at the base of Zone 4 may represent deteriorated plaster and ballast of the Zone 8 floor.

The artifacts of Zone 4 were recovered from the sediment sitting directly in front of the east wall of Structure 501 (Zone 12). Additionally, some artifacts were recovered around the base of the western stairside near the southwest corner of Structure 504 (Zone 14) and the passageway entrance. The remaining regions of the square were virtually sterile and the sediment was cleared down to the highly eroded floor (Zone 8 - Floor 1) in the East Plaza. Since the plaster surface was not intact in most areas and the artifacts appeared only along the sides of the structures, it is highly probable that the both were washed away after years of repeated flooding.

Significant artifactual finds from Zone 4 included one slate flake, several obsidian fragments, and both well-preserved and diagnostic sherds. An incised, perforated ceramic disc (2.5 cm in diameter) with an image of a bird was recovered. The disc was very thin, and may possibly be a spindle whorl. A large volume of human bone was found in Square D, although predominantly concentrated in front of the Zone 12 wall at the center of the square. A few of the incisors were worked and drilled for inlays, similar to those found in Zones 3 and 4 in Square A. The human bone in within Zone 4 in Square D was concentrated in four discrete groups. The first group, Cluster A (Figure 9.2), was the heaviest concentration of bone, located directly in front the east wall of Structure 501 (Zone 12) at the interface of the northern and southern halves of Square D. Cluster B (Figure 9.9), the second group, had the same horizontal provenience as Cluster A, though beginning about 10 cm below the top of A, differentiated as a new cluster for stratigraphic control. The third group, the Northwest Quadrant, contained bone found at the periphery of the northwest corner of Square D. The final group, the Southwest Quadrant, included bone recovered from the periphery of the southwest quadrant of Square D. These bones were found along the low wall of Zone 13, as if washed there. Like the depositional pattern in Squares A and B, the human bone may have washed down from the elevated passageway and translocated to the edges of the surrounding structures.

Zone 13

Zone 13 was an enigmatic feature, underlying the collapse debris of Zone 3 and resting atop Zone 8 or Floor 1, the latest plaza floor in the East Plaza (Figure 9.8). Assigned to Phase 4b, the stone feature appears to post-date the Zone 8 floor and was part of a final episode of architectural modification. Zone 13 was only partially exposed. The small structure appeared rectangular in shape, with 3 courses of large cut limestone blocks, measuring on average 38 cm in length x 20 cm in width x 20 cm in height. The stone structure abutted, but clearly post-dated the basal molding of the east wall of Structure 501 (Zone 12). The structure extended beyond the southern wall of Square D. Limited horizontal exposure inhibited a clear interpretation of the stone feature. It may have functioned as a small shrine structure or stela house that was attached to the eastern side of the pyramid during the final period of site occupation. A small rectangular shrine structure, similar in size and shape to Zone 13, was found abutting a pyramid at the site of Lubaantun in southern Belize that may be comparable. Alternatively, a small, rectangular stela house with low walls found abutting a structure in the main plaza at Xunantunich in western Belize may offer another comparison, although this structure appears somewhat larger than the Zone 13 structure. One other possibility that was considered was that Zone 13 was part of a staircase once connected to the eastern side of Structure 501. Above Zone 13, and protruding out of the south wall of Square D were 4 large cut limestone blocks oriented in a step-like arrangement, suggesting the tread portion of a staircase (see Figure 9.8). However, there are two caveats to this hypothesis. First, this staircase would have been incredibly steep, as the east wall of Structure 501 (Zone 12) in Square D was very tall, while Zone 13 only extended out roughly 1.3 m
from this wall. And second, the basal molding of Structure 501 created a gap between the edge of the Zone 13 wall and the east wall of Structure 501 (Zone 12). Further investigation of the feature is necessary to confirm its function.

Although the Zone 13 feature was not excavated, a portion of the construction-fill was exposed as the surrounding collapse was cleared down. The fill was comprised of a compact, dark yellowish brown (10YR 3/6), silty clay sediment with a medium-high density of gravel and cobble-sized limestone inclusions.

Zone 8

Zone 8 (Floor 1) appeared to be the latest floor in the East Plaza of Group A, built during Phase 4a prior to the Zone 13 construction. The floor appeared to be contemporaneous with the Zone 9 floor found in Square A. The Zone 8 floor covered the first course of the elevated passageway step and measured roughly 15 cm to the level of the passageway corridor (Figures 9.6 and 9.7). The Zone 8 floor was composed of a layer of plaster covering a substantial ballast fill. The fill was semi-compact, dark yellowish brown (10YR 3/4), silty clay sediment, with a high density of pebble and gravel-sized limestone and river stone inclusions. The deteriorated Zone 8 floor was found underlying Zone 4, the final layer of tumble debris in Square D. The floor was best preserved along the southern entrance to the passageway (Zone 28) and along the east side of Structure 501 where the collapse debris from the surrounding structures has protected the floor. The Zone 8 floor did not run underneath any of the surrounding structures and clearly post-dated the passageway construction. Zone 8 was found overlying another plaza floor (Zone 20 - Floor 2) that was associated with the initial construction of the elevated step of the passageway.

A few discrete areas of preserved plaster floor were identified in front of the southern entrance to the passageway and alongside the east wall of Structure 503 (Zone 29) that were labeled Zone 8. These areas of floor were about 10 cm higher in elevation than the rest of the Zone 8 floor throughout the unit. While it is possible that Zone 8 was intentionally built as a sloping floor for the purpose of facilitating the drainage of the passageway, the discrepancy likely represents the remains of a later resurfacing event, probably contemporaneous with the Zone 6 resurfacing event in Square A. As noted, the poor preservation of plaster and the artifact distribution throughout the square suggests that multiple flooding events occurred in this area at the time of collapse that washed away artifacts and caused differential preservation of the East Plaza floors.

Zone 8 yielded a medium density of artifacts including animal bone, freshwater shell, two obsidian flakes, and a minimal quantity of debitage. An abundance of pottery sherds, many with slip and several partially reconstructable, were recovered from the ballast fill of Zone 8. One slipped sherd, possibly a Pabellon Modeled-Carved type, exhibited incising that resembled a glyph. Additionally, one potentially diagnostic vessel foot came from the ballast fill of the Zone 8 floor. It was a solid nubbin foot with rounded edges, slightly out-flaring at the base, measuring 2 cm tall and 1.5 cm in diameter. Several remnants of the plaster surface recovered from Zone 8 were collected. The plaster exhibited only a few areas of smooth, fine paste texture and contained a high density of compact limestone pebble and gravel-sized inclusions.
Phase 3

Zone 14

Zone 14 was a staircase that abutted the southern side of Structure 504, near the southwest corner of the structure (Figure 9.10). The staircase was a later addition to Structure 504 and was not associated with the earliest plaza floor (Zone 21). The western wall of the stairside exposed in Square D was built either after or in conjunction with the Zone 20 plaza floor. The staircase continued to be used after the latest plaza floor (Zone 8) was constructed, which partially covered the basal step.

Figure 9.10. Eastern cross-section of Square D in Operation 54, showing the stairside of the southern staircase of Structure 504.

The stairside was composed of large, cut limestone and riverstone facing blocks that represented the height of the steps of the staircase. The average size of these facing stones was 35 cm long x 28 cm wide x 20 cm high. While Zone 14 was not excavated, exposed construction fill was characterized as compact, dark yellowish-brown (10YR 3/6), silty-clay sediment with a high density of gravel and cobble-sized river stone inclusions. The stairside was poorly preserved, with only three or four intact courses of facing stone (and remnant stairs). Taking the height of Structure 504 into consideration, the Zone 14 staircase probably had around 6 or more steps leading up to the top of the Structure 504 platform.
Zone 20

Zone 20 (Floor 2) was a poorly preserved plaza floor found in the East Plaza of Group A directly underneath Floor 1 (Zone 8) in Square D (Figures 9.6 and 9.7). Little to no plaster surface remained, only the floor’s ballast fill was present. The floor appeared to be contemporaneous with Zone 10 (Floor 3) in Square A, restricted to the North Plaza (Figure 9.5). The floor pre-dated, or was built in conjunction with, the Zone 14 staircase on the south side of Structure 504 (Figure 9.10). Zone 20 was comprised of a loose to semi-compact, yellowish-brown (10YR 5/6), silty-clay sediment with a high density of limestone pebble and gravel-sized inclusions, chert nodules (some macro-debitage) and a lighter density of pebble and gravel-sized riverstones.

The Zone 20 floor abutted but did not run underneath the two-course high passageway step (Zone 28), which measured roughly 30 cm high. The plaza floor was only preserved for the first 50 cm south of the passageway step. The floor abutted the eastern wall of Structure 503 and the western wall of the stairside attached to the southern side of Structure 504. It did not appear to run underneath any of these structures. Zone 20 may have covered the entire East Plaza, but has since deteriorated. Like the Zone 10 floor, the Zone 20 floor contained a similar pinkish-brown fill around the entrance to the passageway that abutted and ran underneath the two-course step. This suggested that Zone 20 was constructed in conjunction with the elevated passageway and some of the underlying fill of Zone 20 served to build up and elevate the passageway. In this respect, Zone 20 in Square D mirrored the function of Zone 10 in Square A.

A very light density of artifacts were recovered from Zone 20, including a few pieces of slate, several slipped sherds, and macro-debitage. There was an abundance of chert nodules in Zone 20 not seen in any other zones in Operation 54. The macrodebitage was of poor quality chert and was used as a major component of the ballast fill of Zone 20.

Zone 28

Zone 28 was the step located in Square D at the southern entrance of the passageway (Figure 9.2). The step comprised a two-course high stone wall construction that was wedged between Structures 503 and 504 (Figure 9.7). The step and elevated passageway appeared to have been built in conjunction with or just after the Zone 20 plaza floor was laid down. The pinkish-brown fill excavated in Zone 20 just to the south of the Zone 28 step appeared to be analogous to the Zone 24 fill found around the northern entrance of the passageway running underneath the step in Square A (see above). The pinkish-brown, mortar-like substance is distinctive from the whitish-gray plaster and ballast construction of the surrounding floor. The pinkish-brown material may have been laid down in preparation for the boulder fill of the passageway (not excavated in the southern end of the passageway).

Phase 2

Zone 29

Built during Phase 2, Zone 29 represented the east wall of Structure 503 (Figures 9.3a and 9.6), and latest phase of this structure. The wall measured roughly 9 m in length, beginning in the southern end of Square A and extending south along the passageway, until its termination in Square D (Figure 9.2). The best-preserved part of the wall in Square D was intact up to nine courses in height (see Figure 9.6). As
noted earlier, the boundary between the end of Structure 503’s east wall (Zone 29) and the beginning of the east wall of Structure 501 (Zone 12) to the south was difficult to discern (see Figure 9.6). It was clear that Structure 501 (the pyramid) pre-dated Structure 503. Therefore, the remains of a faced northeast corner of Structure 501 were anticipated. However, the transition was relatively seamless and only a subtle vertical line at the interface of the two structures could be identified in the profile of the contiguous walls. The beginning of a one-course basal molding demarcated the interface between the two structures. The molding was restricted to the east side of Structure 501 and did not extend further to the north along the east side of Structure 503 through the passageway. In addition, the interface of the two platforms was clearly demarcated in the surface topography of the two platforms.

In Square D, the east wall of Structure 503 (Zone 29) rested on the Zone 21 plaza floor (referred to as the Zone 11 floor in Square A). This surface represented the earliest plaza floor of the East and North Plazas in Group A. The construction of Zone 29 clearly post-dated the construction of this initial plaza floor. However, it may be contemporaneous with the construction of the pyramid, Structure 501, seen in Square D.

**Zone 30**

Zone 30 represented the western wall of Structure 504 and where it corners in Square D (Figure 9.7). This wall served as the eastern wall of the passageway (Figure 9.3b). In Square D, this southwestern corner of Structure 504 was defined in Square D, intact eight courses high. The western side of the wall extended through Squares C (unexcavated) and B to where it cornered in Square A. Like the eastern wall of Structure 503, it measured roughly 9 m in length. The Zone 30 wall rested directly overtop of the initial plaza floor (Zone 21/Zone 11) and post-dated this initial floor construction. About two courses of the east and west walls of the passageway (Zones 29 and 30) were covered over when the elevated passageway surface was constructed.

**Phase 1**

**Zone 12**

Zone 12 was the east wall of Structure 501, found only within Square D in Operation 54 (Figure 9.6). The Zone 21 floor abutted this structure, but did not run underneath it like Structures 503 and 504, indicating that it may be contemporaneous with this initial plaza floor. The Zone 12 wall of Structure 501 had the same orientation as the walls of Structures 503 and 504, 16 degrees east of north, and ran along the western edge of Square D. The wall of Structure 501 merged with the east wall of Structure 503 just south of the passageway entrance. At its tallest point, Zone 12 had eleven intact courses of stone, including a final course that contained a basal molding.

**Zone 21**

Zone 21 was the earliest plaza floor in Group A that appeared to connect with the Zone 11 floor revealed in Squares A and B, running underneath the elevated passageway construction (Figures 9.3, 9.6, 9.7, and 9.10). The floor was characterized by a layer of ballast fill comprised of compact, dark yellowish-brown (10YR 4/4-4/6), silty-clay sediment with gravel and pebble-sized limestone inclusions packed between larger river cobbles. Overlaying the ballast fill was a thin layer of plaster, best preserved in the
northwestern corner of Square D, between the passageway step and the last stone of basal molding of Structure 501. This small area of preserved plaster appeared to be finer than that of Zone 8. The floor exhibited many areas of smooth, fine paste plaster and contained only a lighter density of pebble-sized limestone inclusions. Zone 11 floor in Square A had the same composition.

Only the northern half of the entire East Plaza Floor 3 surface was excavated, reducing the unit size to 2 m (north-south) x 3 m (east-west). The ballast fill of Zone 21 yielded a negligible quantity of artifacts, just several sherds and one jute shell. This tiny assemblage was in stark contrast to that of Zone 8 (East Plaza Floor 1), which offered a much higher density of artifacts.

Zone 22

Zone 22 Square D was an alluvium layer underlying the river cobble ballast of Zone 21 (Floor 3), the earliest plaza floor in Group A. Zone 22 was composed of a semi-compact, dark yellowish-brown (10YR 4/4), silty-clay sediment, containing a very light density of pebble and gravel-sized river stone inclusions. Like Zone 21, Zone 22 was not excavated completely, but rather reduced in size to a 1 m (north-south) x 3 m (east-west) unit, positioned along the southern entrance of the passageway. The first 10 cm in depth was practically devoid of artifacts, yielding only a few poorly preserved sherds. There was a small spike in artifact density after these first 10 cm were excavated (lasting through 10 gallons of sediment or 2 buckets) where one obsidian blade, one debitage flake, and several larger, well preserved sherds were recovered. Following this brief spike, however, the sediment remained virtually sterile for the remainder of the excavation.

Zone 22 was stopped arbitrarily after 20 cm. It became clear that Zone 22 in Square D was the same matrix as Zones 16 through 18 in Square A, on the opposite side of the passageway. Zones 16 through 18 were excavated deeper and the alluvium became virtually sterile just before hitting a river cobble layer (Zone 19), which was most likely the remains of an old riverbed. The excavation was terminated at this level for it was assumed that had Zone 22 been excavated further, the same results would have been observed as in Zone 16 through 19 in Square A.

Conclusion

Operation 54 revealed at least 4 phases of construction and shed light on the chronology of Group A. All four phases relate to the Group A architectural complex. This principle group at Hershey appears to have been built directly over a natural earthen layer or alluvial deposit that covered an old riverbed. The monumental architecture and the enclosed nature of the principle group, comprising formally prepared stone platforms and plaster surfaces, are indicative of the Late Classic period. There does not appear to be any other earlier construction prior to the initial plaza floor of Group A, suggesting a relatively short-lived elite occupation in this locale, maybe lasting several centuries (ca. AD 600-900). Ceramic material gleaned from excavations supports the notion that the elite compound at Hershey collapsed by the beginning of the Terminal Classic period (ca. AD 850-900).

A high density of terminal debris, including deposits of human bone, shell, pottery, and slate, found lying on the final phase of construction in Operation 54 sheds light on the final episode of the site’s history. Dense deposits of disarticulated human remains mixed within a 10-15 cm deep midden-rich layer of debris were found above the East and North Plaza floors. Finds of skeletal material lying directly on top of the
elevated floor surface inside the passageway suggest that the area was still actively being maintained when the skeletal parts were deposited in the corridor. It is conceivable that repeated flooding events washed the bulk of human remains, along with some sediment, into the plaza areas just prior to or in the initial stages of site abandonment (all large collapsed stones were found overtop of the bone deposits).

A large number of teeth were found within the bone deposits and many of them were worked with evidence of drilling for inlays, probably filled with jade like the specimen found inside the fill of the elevated passageway (Figure 9.11a). Additionally, several pieces of worked marine shell were found associated with the bone, including two shell pendants (Figures 9.11b and 9.11c). The presence of inlaid teeth and personal adornment suggest that the remains represent elite status individuals. Associated with the bone were high densities of smashed ceramic pots. Preliminary identifications of the ceramic material indicate that finely-made serving vessels were among the assemblage, including several pedestal-based pyriform vessels that are similar to northern-style wares stemming from Yucatán, Mexico. Mixed with the ceramics were large fragments of slate, recovered from the outside plaza areas. A concentration of slate material was associated with what looked to be a pit feature north of the passageway entrance in the North Plaza. It is possible that the slate is the remains of a stela, similar to other stone monuments found at sites in the Sibun and Stann Creek Valleys. Such acts of desecration often are cited as evidence of violence and warring activity. If the human remains represent sacrificed members of the ruling family at Hershey, the associated smashed vessels and desecrated monuments may be reflective of a violent overthrow of the site center, perhaps orchestrated by polities stemming from the north. Further archaeological investigation may clarify the presence of warfare at this site and yield more conclusive evidence regarding the site’s demise.

Figure 9.11. Photos of artifacts from Operation 54, including a) jade inlaid tooth; b) shell tinkler from Square A; c) shell pendent from Square D (photos taken by P. A. McAnany).
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Chapter 10
The Ballcourt at the Hershey Site (Operation 55)

Jessica L. King

During the XARP 2001 field season, the Hershey Site was surveyed and mapped using a Total Station, GPS, and magnetometer. The survey revealed two elongated mounds, Structures 508 and 509, located southeast of Structure 502. The structures were parallel to each other and situated within the largest pyramidal group at the Hershey Site, Group A. The evidence suggested that the mounds were a possible ballcourt, which led to a magnetometer survey to detect any markers along the central axis of the court. The magnetometry research, conducted by Dan Welch, was completed in a 15 x 5 m area enclosed between the mounds. Results of the survey showed two strong dipole anomalies toward the northern area of the grid, which Welch suggested might indicate a stone marker that fractured into two pieces (Morandi et al. 2003). With this evidence in hand, the excavation of the ballcourt was conducted during the XARP 2003 field season as Operation 55.

The purpose of Operation 55 was to determine if Structures 508 and 509 defined a ballcourt playing alley and if a stone marker was present in the center of the “playing alley”. Survey of the area was conducted in order to decide on an excavation strategy. Structure 508 was found to connect directly to Structure 502—a platform flanking the south side of the main pyramid, Structure 501. The ballcourt mounds, Structure 508 (western mound) and Structure 509 (eastern mound) were both oriented 21° east of magnetic north. Survey also revealed the presence of four large looters’ pits on the two mounds. Looter’s Pit 1, located at the southwestern corner of Structure 508, was 3.3 x 1.7 x 1.3 m in size and may have been the result of stone robbing undertaken to build up the orchard road south of the mounds. Looter’s Pit 2, found at the eastern end of Structure 508, was the largest pit at 3.0 x 3.8 x 2.2 m in size. On the northeastern corner of Structure 508 was Looter’s Pit 3, which measured 1.5 x 2.2 x 1.7 m. Finally, Looter’s Pit 4, on the western end of Structure 509, measured 1.9 x 2.2 x 0.9 m in size, and was the most shallow of all the holes. Excavation was set to occur in the center between the mounds but the backfill piles from Looters’ Pits 2 and 4 interfered with plans for an axial trench across the two structures. It was decided that the largest and most apparent stones from the looters’ pits would be returned to their respective holes before the excavation unit was established. Some of the stones from Looter’s Pit 3 were also returned in order to create a screening area for Operation 55.

Description of Excavation

Operation 55, a 2 x 14 m unit with perpendicular sides at bearings of 21° (long axis) and 111° (short axis) was laid out across the center of the putative ballcourt. The unit incorporated the upper eastern wall of Structure 508 and the upper western wall of Structure 509, in order to include the architecture of both mounds. Operation 55 was divided into four squares, each 2 x 3.5 m, and designated A, B, C, and D from west to east across the unit. Excavation began in Square A and was carried out using trowels and picks.

Zone 1

The topzone of Operation 55, Zone 1, was a very loose sandy-silt sediment. Some stones from the looters’ pits that were still present were also removed as Zone 1 in Squares A, B, and D. The rock
inclusions were limestone and smooth river rocks ranging from gravel to boulder-sized (60 cm long). A few cut limestone pieces were also found among the rocks and were probably once part of the upper retaining walls of Structures 508 and 509. The stones from the looters’ pits indicate that the internal core of the ballcourt mounds were made from large, angular limestone blocks as well as rounded river cobbles and boulders. In Squares A and D, no excavation was conducted inside of the looters’ pits but adjacent, intact areas were investigated in order to find in situ architecture. The removal of Zone 1 in Squares A and D also revealed the upper retaining walls of Structures 508 and 509, respectively. The walls were constructed of cut limestone blocks ranging from 10 to 45 cm in length. Also, they were oriented at a bearing of 21° and were sloped towards the center of the ballcourt (Figure 10.1). The artifact density of Zone 1 was very light in Squares A, B, and C and included mostly eroded sherds, and some animal bones that may be modern. However, the artifact density of Square D was very heavy, especially in the area directly around the edge of Looter’s Pit 4. Artifacts included many sherds (some rim and slipped pieces), four fragments of obsidian blades, animal bone (including a parrotfish pharyngeal jaw), and jute shells. The artifacts may have come from inside the mound or from the top surface of Structure 509.

**Zone 2**

Restricted to Squares A and D, Zone 2 consisted of the wall collapse (not originating from looting activity) and sediment directly on top of the upper retaining walls of Structures 508 and 509. The semi-compact, 10YR 5/4 yellowish brown sediment matrix contained both limestone and river gravel as well as boulder-sized stones. A few collapsed, cut- limestone blocks were removed as Zone 2. Excavation of this zone exposed more courses of the upper retaining walls and revealed preserved plaster covering the cut limestone facing stones. The best preservation was discovered in Square D where the plaster appeared to be at least 2 cm thick. In Square D, the plaster was preserved nearly 30 cm from the wall indicating that the sloping terrace surface also had been covered by plaster. The angle of the in situ plaster sloped downwards toward the ballcourt center indicating that the terraces were sloped as were the upper retaining walls. A piece of obsidian was found in Square A at the bottom of Zone 2, right above the preserved plaster.

**Zone 3**

Zone 3 was a very compact alluvial layer overlying the terrace surfaces and was almost completely sterile throughout the four squares. Artifacts included a few small eroded sherds and a piece of obsidian that was found atop the cobbles in Square A. Excavation of Zone 3 revealed that the terrace surfaces of both mounds primarily were constructed of river gravels and cobbles (5 – 15 cm in maximum length) and some limestone blocks that had once been covered by plaster (see Zone 2 description). The cobbles were angled towards the center of the ballcourt, like the preserved plaster area—further proof that the terraces were sloped.

**Zone 4**

The silty-clay alluvial sediment in the center of the ballcourt, labeled Zone 4, was very compact and had a very light density of artifacts. This zone was restricted to Squares B and C. At the base of this zone, the lower terrace retaining walls of Structures 508 and 509 were revealed. A few stone inclusions were found in the zone and a small number of artifacts were collected. Two pieces of obsidian were found in Square B at the top of the terrace retaining wall. Four courses of the lower terrace retaining walls were uncovered upon the removal of Zone 4. The walls were made of cut, sub-rectangular limestone blocks of a
Figure 10.1. South wall cross-section view of Operation 55 showing sloping walls and terrace surfaces.
very powdery texture. The softness of the stone and the large amount of fine-grained sediment indicate that
the lower terrace walls and center of the ballcourt had been buried in alluvial sediment. These deposits
likely resulted from repeated overbank events as the main channel of the Sibun River is only 350 meters
away. The lower retaining walls were sloped like the terraces and upper retaining walls. The terrace wall of
Structure 508 exhibited the best preservation, with all stones intact, unlike Structure 509 where the stones in
the southern portion of Square C were missing or disturbed.

Zone 5

A continuation of the Zone 4 alluvium, Zone 5 was arbitrarily designated as a new zone in order to
establish stratigraphic control. Its very compact sediment was nearly sterile and had few inclusions. One
flat limestone rock, 10 x 20 cm in size, was found along the northern wall of Square B but had no
associated architecture. Excavation of Zone 5 did not reveal more courses of the terrace retaining walls.
However, two small cut limestone blocks were uncovered in Square C and appeared to have tumbled from
the terrace wall because they were found just below the disturbed portion of the wall. These cut stones
appeared to be resting on a surface, so a new zone was created to determine if the alley surface had been
discovered.

Zone 6

Zone 6 was a portion of preserved plaster in Square A, located in the southwest corner of the unit
and directly east of the upper retaining wall of Structure 508. The excavation of the preserved plaster in this
area revealed that the bottom course of limestone blocks of the upper retaining wall rested on top of this
plaster surface. Because the Zone 6 plaster lips up to the retaining wall, it is evident that the terrace floor
and upper retaining wall were constructed at the same time. The excavated plaster also showed that the
river cobbles of the terrace were once covered. Some of the plaster was collected along with a few small
sherds.

Zone 7

The alluvial sediment above the alley surface, Zone 7, was the same sediment found in Zone 5, and
was separated for stratigraphic control. Excavation of Zone 7 was restricted to Squares B and C and
revealed a layer of small river and limestone cobbles about 10 – 15 cm in size, which appeared to make up
the alleyway surface between the two mounds. The highest concentration of cobbles was in the northern
half of Squares B and C indicating the area with the best preservation (Figure 10.2). The flat limestone slab,
initially uncovered and pedestaled in Zone 5, was removed and plaster was discovered on its underside
surface, which rested on the cobbles. That seemed to indicate that the alley surface was also covered in
plaster, but there was little evidence remaining due to the area having been inundated repeatedly by flooding.
Artifacts from Zone 7 included debitage, sherds, and a C-14 sample that might be useful for dating the use
of the alleyway surface.

Zone 8

The cobbles used to construct the underlying alley surface were designated as Zone 8, and were
only excavated in Squares B and C. Initially, excavation of the zone began in the northern halves of the
respective squares. As the cobbles were removed, a large limestone boulder was exposed in the center of
the alley. The first thought was that this was the ballcourt marker. However, as excavation continued,
Figure 10.2. Operation 55 plan view, Zone 7, Squares B and C showing the cobble alleyway surface.
moving eastward and westward in the squares, more limestone boulders, 20 – 50 cm in size, were uncovered that created a line of stones running perpendicular to the ballcourt alley. As the stones were defined, it became clear that the southern vertical face of the stones had been shaped. The excavation of Zone 8 revealed that the line of stones underlay the terrace walls, indicating an earlier construction beneath the ballcourt, oriented at a bearing of 111°. The single line of stones was continuous from Squares B to C. A second line of stones just south of, and adjacent to, the first row ran west to east in Square B only and appeared to be a step or extension of the earlier construction (Figure 10.3). Excavation of Zone 8 also revealed that the limestone blocks were retaining a cobble fill, indicating that the shaped face of the stones represented the outer surface of an earlier structure.

Zone 9

Zone 9 was fill associated with the construction of the ballcourt alley. It was excavated in Squares B and C and was restricted to the area south of the row of limestone boulders. The soil was semi-compact and a 7.5YR 4/3 brown color. The matrix of the sediment contained river cobbles and a few limestone gravel-sized inclusions. The artifact density was very high and included sherds, obsidian and debitage. Three C-14 samples were collected that may be useful for dating the construction of the fill. Excavation of Zone 9 revealed that the earlier structure had a single course of limestone blocks, and might have been a raised area of the plaza.

Zone 10

Located below Zone 9 in Squares B and C, Zone 10 was a very compact silty clay sediment, 7.5YR 3/4 dark brown in color. The interface between Zones 9 and 10 was distinguished by a change in sediment color and density. Zone 10 appeared to be a packed earthen floor aligned with the wall of the structure beneath the ballcourt. Artifact density was very heavy in this zone and included many well-preserved sherds and chunks of charcoal. Together, the charcoal (used for radiocarbon analysis) and the sherds (used for temporally sensitive type-variety analysis) may be useful for dating the terminal use of the earlier structure and initial construction of the ballcourt. Zone 10 had very few stone inclusions compared to Zone 9. The rocks consisted of a few small limestone chunks and river gravel that were found sporadically throughout the zone. The end of Zone 10 was noted by a change in sediment color and consistency and an abrupt change to artifact sterility.

Zone 11

Zone 11 was a very compact earthen layer, was located below Zone 10 and solely excavated in Square C. The sediment, 7.5YR 4/6 strong brown in color, had few artifacts or rock inclusions. The soil was a dense silty-clay that was homogenous throughout the zone.

Zone 12

A continuation of the compact earthen layer of Zone 11, Zone 12 was also restricted to Square C and had a light density of artifacts that included only sherds. The layer appeared to continue down further because no stone architecture was uncovered. The earthen layer of Zones 11 and 12 may have represented fill for an earlier structure because it was not completely sterile, like the alluvial sediment found in Zones 3
Figure 10.3. Operation 55 plan view, Zone 8, Squares B and C showing the earlier structure beneath the ballcourt.
through 5. A posthole probe was scheduled to follow the completion of Zone 12 but a heavy rainstorm on
the night of 9 April 2003 completely flooded Squares B and C, making further excavation impossible.

Discussion

The excavation of Operation 55 proved that Structures 508 and 509 were configured to create a
ballcourt at the Hershey Site. The parallel orientation was one of the first clues but excavations revealed
that both structures featured the same architectural form. Both mounds were built with inclined upper
retaining walls, sloping terraces, and lower terrace retaining walls. Evidence of inclination was apparent on
both structures and the preserved plaster further supports the notion that the surfaces were sloping in
towards the playing alley. Observation of the ballcourt at Nim Li Punit, in contrast, revealed that the
ballcourt structures were built with sloped upper and lower retaining walls and flat terrace surfaces. The
main ballcourt at Lubaantun features inclined lower terrace retaining walls but vertical upper retaining walls
and flat terrace surfaces. The ballcourts at these sites show the variation in architectural styles used in Maya
ballcourt construction. All evidence collected from excavation of the Hershey ballcourt points towards a
single construction event for the ballcourt; no evidence of refurbishing or expansion was identified.

Although the excavation of Operation 55 did not reveal a ballcourt marker, it did uncover an earlier
structure running beneath the two mounds. The low profile (one course of stone) of the structure and the
fact that its long axis is perpendicular to the standing ballcourt argues against the possibility that this buried
structure was an earlier ballcourt. Rather, this underlying construction appears to have been a small
(possibly residential) platform or a raised plaza. Due to time constraints, Operation 55 was not expanded
north through the center of the court in order to further define the earlier buried structure. Expanded
excavation may have also uncovered a hearth or burned feature on top of the earlier structure or on the
playing surface of the ballcourt, which might have been used to account for the strong anomalies read by the
magnetometer. Analysis of pottery from Operation 55, especially from Zones 9 and 10, will help to date the
earliest use of the ballcourt and terminal use of the underlying earlier structure.

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Chapter 11
Construction Sequences at the Group B Pyramid (Operation 56)

Steven Morandi

The Mystery of Group B

The Hershey Site is the largest identified site in the Sibun River valley, and the layout and architectural style of its structures are much different than any sites encountered downstream. Of the several major groups mapped at the Hershey Site, Group B has always stood out. Not only does it sit apart from other architectural groups and closest to the Sibun River, but also it consists of a large pyramid and smaller structures at or near the apices of a massive triangular substructure (see Morandi et al., 2003; Figure 11.1). The tallest side of this odd-shaped platform parallels the Sibun watercourse, and continually would have been eroded by flooding during the rainy season. In fact, Group B would have become an island during significant flooding events. All three Group B superstructures were found in looted condition, with pits at their summits.

Excavations were undertaken at Group B in order to glean some basic information about this unusual architectural complex. Structure 514 was chosen for this purpose because its large size offered the best chances to observe an undisturbed construction sequence within. One goal of the excavation was to understand the construction sequence of Structure 514 from both an architectural and chronological viewpoint. The other major goal was to relate Structure 514 stratigraphically to the underlying platform to get a glimpse of how the Group B complex took shape as a whole.

Operation 56

A cardinally-oriented 10 x 8 m excavation unit (Operation 56) was set up on the southern side of Structure 514 to capture as much data as possible given the time allotted. The unit was divided into eight squares measuring 2.5 meters wide (east-west) by 4 meters long (north-south) and lettered east to west A-D in a northern row, and E-H in a southern row. Squares A and E, toward the centerline of Structure 514, soon became the focus of excavation.

Zone 1

A topzone full of rootlets, Zone 1 was excavated across all squares of Operation 56 except Square H. This relatively thin layer of sediment covered the ultimate construction phase of Structure 514, indicated by the tumbled flat limestone blocks revealed underneath. This zone contained a low density of small rounded pebbles. Obsidian fragments and speleothems were found along with eroded pottery sherds in this layer.

Zone 2

Beneath this topzone was an earthen layer with associated tumbled limestone cobbles, designated Zone 2 (Figure 11.2). Though the color and texture of this sediment was the same as that of the topzone (7.5 YR 3/4 dark brown silty clay loam), it contained a high density of small rounded pebbles.
yielded a similar assemblage of artifacts as the topzone (pottery sherds, obsidian, speleothems) but in a much higher density. About 1000 sherds were retrieved from Square E alone. For stratigraphic purposes, the tumbled cobbles within this sediment were later called Zone 6. The removal of Zone 2 exposed several architectural features that comprise a clear sequence of construction events as described below.

**Zone 3**

The least understood feature of Operation 56, consisted of a rectangular patch of limestone and river cobbles in Square E, called Zone 3. The purpose of this feature is unknown. It may be the remains of a wall or step that was partially removed. The cobbles were set in a single course layer.
Figure 11.2. West wall profile of Operation 56 (drawn and inked by S. Morandi).
Structure 514: The Final Construction Phase

Zones 4 and 5

Zones 4 and 5 can be considered together, since they appear to be non-contiguous examples of the same feature. These zones represent a surface located along the base of Structure 514 (Squares A, E, F, and G; see Figure 11.3). Due to taphonomic alterations, this surface deteriorated rapidly as it extended out from the edge of the bottom tier toward the center of the plaza. The well-preserved edge of this surface could be identified as plaster with gravel inclusions and was up to 14 centimeters thick at the base of Structure 514, where it formed a lip against Zone 15, the basal tier of the front staircase.

Zone 6

Comprised of tumbled limestone blocks strewn throughout Zone 2 sediment, Zone 6 was later separated out for the purposes of defining construction sequences for the Structure 514 complex (Figure 11.2). These rough limestone blocks probably originated as facing stones for Zones 12, 13, 14, 15, and 18, the tiers of the final construction phase. It should be noted that although the limestone cobbles were not artificially shaped in any way, it appears that they were selected for naturally flattened sides that could be used for construction purposes.

Zones 12, 13, 14, and 15

Four highly deteriorated tiers or steps of Structure 514 were identified as Zones 12, 13, 14, and 15, with Zone 15 at the base of the structure and Zone 12 as the fourth tier up from the contemporaneous plaza surface (Zones 4 and 5; see Figures 11.2 and 11.3). These tiers are of dimensions that allow easy access up the side of the structure. No trace of plaster was found anywhere on the surface of Structure 514, and it is unclear whether it ever had a plaster coating, though one would assume it did. In the eastern part of Operation 56, these steps follow a relatively straight line at about 7° south of east. They originally appeared to curve northward in Square A, but further excavation revealed that they undulate along their span (Figure 11.2), whether due to original design or taphonomic alteration.

Zone 18

A fifth tier of Structure 514, Zone 18 does not appear to have been a step, as it is high enough to block easy access to the top of the structure (Figures 11.2 and 11.4). The limestone blocks used to construct this tier are much flatter than those in the lower tiers, and quite soft and crumbly.

Zone 7

Zone 7 was an earthen layer considered to be the construction fill beneath the floor of Zones 4 and 5, can be chronologically associated with this overlying plaza surface (Figure 11.2). A light density of pottery sherds was recovered from this zone.

Zone 17

An earlier version of Structure 514 was indicated by the construction sequence beneath Zone 7. Though Zone 15 was the basal tier in the final phase of Structure 514, an even lower tier was uncovered
Figure 11.3. Plan view of Operation 56. Shown in cutaway view to display maximum information (drawn and inked by S. Morandi).
Figure 11.4. North wall profile of Operation 56, shown in cutaway view to display maximum information (drawn and inked by S. Morandi).
beneath the fill (Zone 7) of the final plaza surface (Zones 4 and 5). Labeled Zone 17, this bottom step was relatively well-preserved, with many in situ facing stones (Figures 11.2, 11.3, and 11.4).

**Zones 8 and 9**

This lower step sits on an earlier plaster surface (Zone 9) that, like Zones 4 and 5, is well preserved near the edge of the structure, but progressively more deteriorated to the south, toward the center of the plaza (Figure 11.3). Whereas the surface of Zones 4 and 5 terminated at the bottom edge of the Zone 15 tier, the Zone 9 surface continued beneath the Zone 17 step. In one area (Square F), a thick layer of plaster was found on top of the Zone 9 surface against the Zone 17 step. This layer, called Zone 8, was about 150 cm wide and 5 cm thick, protruding from the base of the step about 20 cm at its maximum extent. Likely a remnant of a resurfacing event, it remains curious that this new layer of plaster is preserved only in this one section.

One of the sherds associated with Structure 514 proved to have very fine incising on its surface. Once cleaned in the lab, it was revealed to exhibit a portion of a glyphic text. According to Stephen Houston (personal communication to Patricia McAnany, 2003), the symbol represents part of an early form of the Naranjo emblem glyph (Figure 11.5). This is a significant find, since the polity of Naranjo was perhaps the closest major center to the Hershey Site during the Classic Period. This link between the Hershey Site and a Petén center may reflect the broader control of the latter over Sibun Valley sites in prime cacao growing areas.

![Figure 11.5. Partial early-style Naranjo emblem glyph on sherd associated with Structure 514.](image)
Structure 514-sub-1: A Well-Preserved Platform

Maya ritual architecture often displays pronounced spatial constancy. Frequently, pyramidal structures are enlarged at which point the earlier structure may be used as a core for later architectural additions. In some cases, the facades of earlier structures were destroyed for practical or religious purposes while, in other cases, the underlying structures were perfectly preserved. The fact that the Zone 9 plaster surface ran beneath the Zone 17 step hinted that some other architectural features might be found beneath Structure 514; accordingly, further investigation of the construction sequence continued with deeper excavation in Squares A and E on the western edge of Operation 56. Balancing factors of time and the need for at least basic information about the construction sequence, we decided to excavate the westernmost portion of Square A in a section 1.5 meters wide.

Zone 16

Structure 514 was literally dismantled in steps, beginning with the Zone 18 terrace, working down the slope through Zones 12 to 15, finishing with the removal of the Zone 17 basal step. The removal of these tiers revealed two features. When Zone 18 was removed, it was found to have overlain a perfectly preserved plaster ledge about 30 centimeters wide that appeared to be part of a step. Beneath Zones 12, 13, 14, 15, and 17 was a homogeneous fill (Zone 16) of dark yellowish-brown, semi-compact silty clay loam that contained a high density of rounded pebbles up to 5 centimeters in size (Figure 11.2). This fill was removed as one unit and contained surprisingly few artifacts.

The removal of Zone 16 revealed a series of four steps of an earlier edifice (dubbed Structure 514-sub-1) that had an extremely well preserved plaster surface. The Zone 9 plaster surface that ran beneath the lowest step of Structure 514 formed a continuous layer with the Structure 514-sub-1 steps (Figures 11.2, 11.3, and 11.4). Interestingly, this surface sloped toward the base of Structure 514-sub-1, perhaps to channel water off of the plaza during times of significant rainfall. The steps of Structure 514-sub-1 are parallel and run in an orientation of approximately 7° south of east. Step elevations relative to the Structure 514 tiers (almost identical) indicate that the final construction phase was a carefully planned expansion of underlying Structure 514-sub-1.

Zone 19

Excavation of Zone 18 eastward across the very northern portions of Squares A, B, and C revealed what seem to be the well-preserved fifth and sixth steps of Structure 514-sub-1. A poorly preserved and non-contiguous portion of the fifth stair in Square A was labeled Zone 19 because it was excavated before the other portions of that step, but should be thought of as a part of the Zone 9 plaza surface (Figures 11.3 and 11.4).

Structures 514-sub-2

Shortly after beginning the excavation of Zone 20, a small portion of another plaster step was encountered (Zone 24; see Figure 11.2). This isolated feature could not be easily related to existing architecture, and remains enigmatic. Presently, it is considered to be part of a separate structure (514-sub-2), and only excavations farther to the north will clarify its relationship to other construction phases.
Structure 514-sub-3: An Incipient Architectural Complex

Due to time constraints coupled with the desire to leave a reference section of stratigraphy, we decided to excavate the westernmost portion of the lowest four stairs of Structure 514-sub-1, in a 1-meter wide section. This left a 0.5 meter-wide section of the Structure 514-sub-1 surface unexcavated.

Zones 20, 21, 22, 23

For purposes of stratigraphic control, Structure 514-sub-1, like the structure overlaying it, was excavated step-by-step. From top to bottom, the lowest four stairs were designated Zones 20, 21, 22, and 23 and the base of each zone was simply leveled with the top of the underlying stair (Figure 11.2).

Beneath the very hard plaster surface of the Structure 514-sub-1 stairs, some facing stones were found as well as a homogeneous construction fill of yellowish-brown loam with pebble and cobble-sized limestone and a low density of rounded river stones up to 4 centimeters in length. Zone 22 provided a rare C-14 sample that will be important in providing information about the construction date of the platform.

Zones 26, 27, and 30

As with Zone 16, the removal of Zones 22 and 23 revealed an earlier structure, this one designated Structure 514-sub-3. Only the southernmost edge of this platform could be exposed due to the limits of the excavation unit. Structure 514-sub-3 contains at least two tiers and a central core of limestone cobbles. The basal tier, labeled Zone 27, consists of a limestone wall that retains the fill of a strong brown sandy clay loam (7.5 YR 4/6) with no visible inclusions (Figures 11.2, 11.3, and 11.4). One piece of obsidian was recovered from this zone. The upper visible tier (Zone 26) consisted of a wall of limestone with some associated sediment (same color and texture as Zone 27), but was backed by a core of cobbles (Zone 30). Obsidian, pottery sherds, and a C-14 sample were found in the cobble core that resembled the matrix of Zone 11—the fill of the Group B platform (see below). Due to time constraints, a definite connection could not be established.

Earlier Construction at Group B

Zone 10

The deepest portion of Zone 9, the sloping edge of the Structure 514-sub-1 plaza, was also removed during excavation. Beneath it was a layer of construction fill (Zone 10) with some inclusions near the plaster surface, but none after the first 5 cm (Figures 11.2, 11.3, and 11.4). These inclusions may have been used to give “body” to the sediment for purposes of plaster surfacing, or they may have deteriorated from the bottom of the Zone 9 plaster.

Zone 11

Below this fill was Zone 11, a uniform layer of cobbles up to 40 cm across with no associated sediment (Figures 11.2, 11.3, and 11.4). The cobbles were naturally cemented by a material (likely
CaCO₃) that precipitated from the ground water. Tiny crystalline stalactite formations up to about 10 cm in length were found hanging from the bottoms of some of the stones. An attempt to excavate Zone 11 was thwarted by the extreme hardness of this natural cement. A rudimentary investigation of these holes was performed with a flashlight and probing stick. It appears that these cobbles continue to a depth of at least one meter; these cobbles probably form the core of the Group B platform. In comparison, the southern edge of this platform—which has been eroded by floods—reveals an exposed core of cobbles at least two meters deep (admittedly, the platform height on this edge is over five meters).

Zone 29

As the portion of Zone 10 most proximate to Structure 514-sub-3 was removed, it did not contact the cobble stratum of Zone 11. Rather, another plaster surface (Zone 29) was discovered (Figures 11.2 and 11.3). This surface was only explored in a limited area due to time constraints, and its relationship with Structure 514-sub-3 remains unknown.

Zones 25 and 28

A strange pit-like feature with a hard raised lip was found extending into the Zone 29 surface (Figure 11.2 and 11.3). Its contents were excavated as two separate zones (Zone 25 and 28) due to changes in sediment texture and inclusions.

Clearly, other architectural features may be found below the bottom levels of Operation 56 and, given the size of the Structure 514 mound, structures pre-dating 514-sub-3 could conceivably be found. C-14 dates from different construction phases should help guide both the reconstruction of the building sequence at Group B as well as future excavations.

References Cited

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Chapter 12
The Eastern Shrine of Group A (Operation 57)

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Operation 57 is a 2 x 2 m unit located on the north/northeastern side of Structure 536, an isolated mound situated directly east of the main pyramid (Structure 501) at Hershey. The operation was excavated as one unit, Square A, and was not further sub-divided. The goal of the excavation was to expose the exterior wall of the structure and determine whether it was a rectilinear platform or a circular structure, like the shrines found at Pechtun Ha, Samuel Oshon, and Augustine Obispo—sites down river and closer to the coast. The structure was badly disturbed by tree root activity and heavy looting sometime in the past.

The isolated nature of the structure and its position in relation to the main elite residential complex (Group A), in alignment with the main pyramid and nearby ballcourt, suggested a special-purpose building with a ritual, rather than residential, function. Excavations were designed to gather both architectural and artifactual data from the test unit to better understand its relationship with Group A, as well as Group C directly to the east. This single structure is positioned within the center of a large plaza that separates Groups A and C.

Overview of Operation 57

The 2 x 2 m unit was positioned so that a portion of the northeastern exterior wall could be exposed, along with an area outside of the structure. The unit was oriented 30 degrees east of north, in line with the orientation of the structure. However, when referring to the southwestern side of the unit, where the northeastern exterior wall was exposed, it is referred to as the “south” side of the unit and, likewise, the northwestern side of the unit is referred to as “west”, and so forth.

Zone 1

The Zone 1 topzone of Operation 57 did not contain a pronounced humic layer. Rather, the surface was disturbed through active bioturbation (ants, rodent burrows, and tree growth). The unit was situated at the edge of a cacao orchard within which large shade trees have also been planted. One of these large trees is located on the top of the mound, along the southern edge of the unit (Figure 12.1). The structure has been heavily looted along the southeastern side of the structure. A large trench cuts through one side of the structure and deeply penetrates the interior of the small platform. The excavation unit was situated on the edge of the large looter’s trench, outside of the severely disturbed area. The shape of the mound suggests that it may also have endured some plowing or other disturbance, perhaps when the cacao orchard was established.

The soil of Zone 1 was quite loose and comprised a clay-filled matrix with few inclusions. There was quite a bit of tumbled construction debris (loose, boulder-size cut limestone blocks) on the southern edge of the unit, where the remains of the exterior wall were located. These loose stones were removed as part of Zone 1 that was a mix of loose topzone (rootlets and other organic debris) and tumbled debris.
At the base of Zone 1, the linear exterior wall of Structure 537 could be discerned and confirmed that the shrine was not of circular form. A planview sketch was drawn during the excavation of Zone 1. Collapsed construction stones were strewn on and around the intact wall that runs 30 degrees east of north. No artifacts were found in the disturbed Zone 1 topzone. Due to the disturbed and sterile nature of the matrix, only 50% of the matrix was screened.

Zone 2

Zone 2 consisted of the tumbled debris directly below the Zone 1 topsoil. The zone size changed slightly, restricted by the appearance of the intact, straight northeastern wall of Structure 536 running parallel with the southern edge of the excavation unit (aligned 30 degrees east of north). The area of Zone 2 measured roughly 140 x 200 cm. Excavations continued to reveal collapse debris, consisting of large boulder-size limestone (mostly cut facing stones) and river stones. By the bottom of Zone 2, more courses of the structure wall had been exposed. Artifact density was low (n=7), with several ceramic sherds appearing at the base of the zone, close to the wall. Only 50% of the matrix was screened due to the paucity of artifactual material within the collapse. An archaeobotanical sample was collected, though it appeared to be fragments of charred modern cacao pods. One possible fragment of ground stone was recovered. The largest limestone boulder from the matrix measured 55 cm in length by roughly 35 cm in thickness.
Zone 3

The upper 15 cm of Zone 3 contained the remaining collapse debris of large limestone tumble displaced from the northeastern side of Structure 536. Below this tumble is a loose matrix of soil filled with river cobbles (roughly 8 x 5 cm) associated with larger river cobbles (ranging between a measurement of 30 x 15 x 15 cm and 55 x 22 x 15 cm). These river cobbles, clustered in the northern portion of the excavation unit, were encountered at an elevation of approximately 157-165 cm below datum and appeared to be collapse debris. One looked possibly worked, suggesting it may have been used as a facing stone. However, most of the river cobbles were rounded and were likely interior construction fill material. They may represent collapse debris that spilled out from the structure interior following the collapse of facing stones. Alternatively, the river cobbles may be intact fill from a highly deteriorated floor construction. The matrix in the northwest corner of the excavation unit became slightly more packed in Zone 3, possibly marking the extent of root disturbance. The large river stones, ranging between 5 and 55 cm, appear to be located only in the northern portion of the unit.

At around 170 cm below datum, the nicely faced stones of the Structure 536 exterior wall ceased and a wall of stacked stones that were not faced continued beneath this level. The wall of roughly hewn stones and the fill to the north of the wall resembled a fill layer of a terrace construction, consisting of dry-laid boulder-sized limestone and river stone. No floor surface was identified, but the transition between the faced wall stones and the dry-laid fill layer was discernable in cross-section (Figure 12.1). Zone 3 ended about 10-15 cm into this fill layer when the change was more clearly identifiable. This change in construction may represent the level of the plaza floor that is no longer preserved. However, the substantial construction layers that continued beneath this level suggested that there may have been an elevated terrace surrounding the perimeter of Structure 536 that extends beyond the limits of the excavation unit.

The matrix removed as Zone 3 was virtually devoid of artifacts and only 50% screened. Three or four sherds were found in the southeast and southwest corners of the zone, around the 170 cm below Datum. At least one of the sherds from the southeastern corner, found at about 173 cm below Datum, appeared to be diagnostic. Three other sherds were found at roughly the same elevation. These artifacts may be associated with the construction fill layer or, more likely, represent terminal debris on the surface of an outside plaza floor or terrace surface that surrounded the perimeter of the small structure. Cross-section drawings of the southern and eastern walls of the unit show this transition (see Figures 12.1 and 12.2), while the interface is more difficult to discern in the north and west wall cross-sections (Figures 12.3 and 12.4). There were no signs of a surface at this transition. However, the dry-laid boulder material, containing voids with little soil, was relatively compact and uniform and did not resemble the collapse found above.

Zone 4

Zone 4 began as an arbitrary level within the substantial dry-laid core fill of either a plaza floor or a terrace construction. The excavations in the Ballcourt (see King, Chapter 10) revealed no such dry-laid fill associated with the plaza floors in that section of the East Plaza, nor was there any evidence of this type of fill layer associated with a portion of the East Plaza excavated in Operation 54. This evidence suggests that the construction fill of Operation 57 was likely a discrete fill layer that formed an outer terrace ringing the perimeter of Structure 536 and elevating it from the surrounding East Plaza. The fill included a layer of cobbles and a few gravel-sized inclusions, followed by larger, boulder-sized limestones and river stones. At
Figure 12.2. East wall cross-section of Operation 57 showing profile of northern exterior wall of Structure 536 and surface level of construction fill (drawn and inked by E. Harrison-Buck).

Figure 12.3. North wall cross-section of Operation 57 (drawn and inked by E. Harrison-Buck).
Figure 12.4. West wall cross-section of Operation 57 (drawn and inked by E. Harrison-Buck).

Figure 12.5. Final plan view of Operation 57 (drawn and inked by E. Harrison-Buck).
the base of Zone 4, the boulder fill was tightly packed with large voids and little soil between the stones. Zone 4 was roughly 20 cm deep and was devoid of cultural material. Several charred cacao pod fragment were noted but not collected.

Zone 5

Zone 5 consisted of dry-laid construction fill of tightly-packed, boulder-size limestone and river stones. There were few cobble or gravel-size inclusions in this level. With the exception of a few animal bones, which may be modern (rodent holes were noted in and around the unit), the zone was devoid of cultural material. A final plan view was drawn (Figure 12.5) and excavations ceased at this level (ca. 230 cm below datum).