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PVN OP 019 Excavation Report

Edward Schortman

Kenyon College, schortma@kenyon.edu

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Operation 19

Operation 19, in the southwest corner of La Sierra's North Group, contains nine structures and a surface feature crowded within a triangular shaped area of land formed by the junction of the Quebrada Danta with an unnamed northern tributary. Operations 13 and 14 border this agglomeration to the north and northeast, respectively, while the La Sierra Main Group lies a scant 30m to the south across the Quebrada Danta. Structures 57-62 surround a patio on all sides save the west, Str. 65 being located in the approximate center of that open space. The remaining buildings lie immediately southeast of the patio-group, perched on the upper slopes of the steep descent into the Quebrada Danta's channel. A cobble wall that does not project far above current ground surface but is 2.5m wide, intersects Str. 63's west corner. This construction defines a rough C-shape open to the northeast and parallel to the natural contours formed by the confluence of the Danta and its northern affluent. The terrain in Op.19 slopes gradually down from north to south towards the seasonal watercourses, the rate of decline increasing sharply as the banks are reached. Approximately 274m² were cleared in the course of investigating six surface-visible buildings in Op.19 during the 1988 and 1990 field seasons (Strs. 57-62 and 10 edifices not detected on ground surface, Strs. 19-Sub1- 19-Sub10). Of this number, six were sufficiently cleared to reconstruct their overall dimensions along with something of their final form (Strs. 58, 60, 61, 62, 19-Sub1, and 19-Sub2). The remaining buildings were only subject to limited investigations. Work here was overseen by D. Schafer, S. Kane, and J. Miller in 1988, N. Ross, J. Douglass, E. Bell, and M. Yeager directing the 1990 investigations.

Structure 57

Structure 57 closes off the northwest corner of the Op. 19 patio, lying ca. 10m west of Str. 58 and 25m north of Str. 61. The land on which Str. 57 is raised ascends gradually from southeast to northwest and southwest to northeast away from the banks of the quebradas that delimit Op. 19 on the southeast and southwest. Investigations here were restricted to a single trench (Subop. 19C) measuring 1x3.96m dug against the building's southeast, patio-facing flank. Excavations were carried down to a maximum depth of 1m below modern ground surface outside construction (architectural fill was not probed) revealing a single building phase. The work was directed by S. Kane.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1	-	LCLI/II
2	Str. 57-1st	U.1-2	-	-	LCLII/III
3	-	-	S.1-3	F.1	-

Time Span 1

The earliest activity recognized in Subop. 19C is the natural deposition of a soil level that, regrettably, went undescribed during the recording process. This layer is at least 0.42m thick, its base lies beyond excavation limits, and descends 0.05m over its exposed 1.05m horizontal distance (extending northwest from the southeast trench margin). Directly overlying this level is S.1, a moderately coarse-textured tan soil that accumulated to a depth of roughly 0.1m during TS.1 (this is the portion of S.1 that underlies construction). Recovery of artifacts from lower S.1 indicates a human occupation in the immediate area while this layer was being deposited; S.1's unnamed predecessor did not contain cultural material within the limited depths over which it was exposed.

Time Span 2

Structure 57-1st's basal (U.1) and first ascending (U.2) southeastern terraces were revealed in Subop. 19C. The former rises 0.25m while the second is preserved to 0.3m high. The earthen surface backing U.1 on the northwest is 0.6m wide; U.2 gives way to a tread that is at least 0.6m wide, the next ascending terrace not having been located. Structure 57-1st is sufficiently tall that at least one more terrace likely intervened between U.2 and the summit. Units 1 and 2 are aligned roughly 226 degrees and are built of unmodified river cobbles set in a brown mud mortar.

Time Span 3

Following Str. 57-1st's abandonment, U.1 was covered by the resumed accumulation of S.1. This layer, and most of the rest of Str. 57-1st, was blanketed by the natural deposition of S.2 and 3. These moderately coarse-textured soils differ only in overlying S.3's darker brown color and greater concentration of small roots. Together, S.2 and 3 bury S.1 by 0.6-0.8m. A moderately dense concentration of stones fallen from final-phase architecture (F.1) is embedded in S.1-3 (most are concentrated in S.2). Feature 1 rocks are found above U.1 and 2 and extend for minimally 1.8m southeast of U.1.

Structure 58

Structure 58, situated 10m east of Str. 57, 3m west of Str. 59, and 15m north of Str. 60, defines the northern flank of the Op. 19 patio. The ground here drops slightly from southeast to northwest, descending 0.36m over 10.9m horizontal distance. Excavation of roughly 75m² within Subop. 19A, D, and E cleared the entirety of the building's summit along with portions of the northwestern and southeastern basal retaining walls. Digging was carried down to a maximum depth of 0.94m below modern ground surface outside construction (architectural fill was not investigated) revealing two building phases and evidence of a structure not discerned on ground surface (Str. 19-Sub11). All work was overseen by S. Kane and D. Schafer during the 1988 field season.

Time Spans

Time Construction

<u>Span</u>	<u>Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1,2	F.1	LCLI/II
2	Str. 58-2nd Str. 19-Sub11-1st	U.1,2 U.3	- -	- -	LCLII
3	Str. 58-1st	U.4-26	-	F.2,3	LCLII/III
4	-	-	S.3,4	F.4	-

Time Span 1

Stratum 1, a coarse-textured, soft-compacted brown sand, was exposed to a maximum thickness of 0.16m northwest of construction (digging was not carried down to sufficient depths elsewhere to test for the existence of this layer). Stratum 1's base was not located and its top is 0.18m below the base of TS.3 architecture (U.5 in this case). This level descends a scant 0.04m southeast-to-northwest over the 1.34m it was exposed. Stratum 2, a moderately fine-textured, hard-compacted, tan soil blankets S.1 and is found running beneath architecture dating to TS.2 and 3. Roughly 0.3m of this soil was deposited during this interval. Stratum 2 ascends 0.06m across 8.6m southeast-to-northwest.

Feature 1 is a small pocket of fine-textured, soft-compacted gray ash exposed in S.2 at the base of excavation off Str. 58-1st's southeast side. This deposit was uncovered 0.33m below S.2's top, covers a revealed horizontal distance of 0.36m, is at least 0.05m thick, and is 1.54m southeast of Str. 58-1st's U.19. Undoubtedly, we only encountered a small fragment of a larger ash deposit, though how much bigger this element might have been remains unknown. Recovery of artifacts from S.2, together with F.1, points to a human presence in the immediate vicinity while the soil level was being laid down. This finding conforms to the identification of cultural material within analogous soils that run beneath nearby Strs. 59-1st (S.1), 60-1st (S.4), and 62-1st (S.1). The culturally sterile S.1 sand might find a counterpart in the similar soil deposited prior to revealed construction in the area of Str. 60 (S.1). The latter stratum also lacks signs of human settlement.

Time Span 2

Structure 58-2nd is represented by two cobble lines identified in the floor of Str. 58-1st's southeastern room (U.1 and 2). Neither of these elements may have protruded above the final floor, preserved over part of the area as F.3 (see TS.3, below). The visible portion of U.1 is L-shaped, extending 0.9m northwest from under U.8 on the southeast before turning to run at least 1.15m to the northeast where it disappears beneath U.11. Unit 2 forms a U-shaped entity measuring 0.6-0.65m on its short southwest and northeast sides and 1.35m along the southeast flank. This construction disappears below U.12 on the northwest, a connection with U.1 possibly obscured by this wall and U.11. The tops of both U.1 and 2 are preserved to roughly the same elevation and the two constructions are most likely components of an earlier version of Str. 58-1st. They may define the borders of one or more rooms, either raised on ground surface or atop a low, undetected, platform. Both U.1 and 2 are fashioned of unmodified river cobbles

and are oriented approximately 57 degrees and 65 degrees, respectively.

Excavations intended to reveal Str. 58-1st's southwest flank encountered a cobble wall (U.3) that was buried by TS. 3 architecture (U.6, 8, 10, 13, and 23). Unit 3 was revealed over a distance of 5.4m northwest-southeast, beginning at roughly 0.25m high on the southeast and stepping up to 0.6m tall at a point 0.9m northwest of the southeastern end. The southeastern terminus was identified while the northwest margin was lost beneath later construction. Unit 3 extends 1m southeast of Str. 58-1st's basal construction (U.4), almost all of it in this area blanketed by S.2. This stratigraphic relation not only points to U.3's temporal priority vis a vis Str. 58-1st's architecture but also implies that the putative platform facing was raised during a break in S.2's deposition. Apparently there was a period following U.3's use when the element was covered by continued accumulation of S.2.

Though it is far from clear, U.3 seems to be the northeastern facing of a 0.6m-high platform (Str. 19-Sub11-1st) of unknown basal dimensions that is aligned roughly 150 degrees, 30 minutes. Later Str. 58-1st architecture overlaps this basal retaining wall, but extends well beyond it on the northeast where summit architecture rests on fill piled in behind basal walls on the northwest and southeast (U.4 and 5, see below). By TS.3, therefore, Str. 19-Sub11-1st was no longer a distinct edifice but had become part of a larger construction atop which Str. 58-1st's superstructure was raised. Unit 3 is built of unmodified river cobbles set in a brown mud mortar.

Time Span 3

Structure 58-1st is, essentially, a northeast extension of the putative earlier Str. 19-Sub11-1st. The basal retaining walls of this construction (U.4 and 5) stand 0.38m and 0.14m above S.2 on the southeast and northwest, respectively. The northwestern facing (U.5) maintains a fairly straight line over the 3m it was exposed. Unit 4, on the other hand, is characterized by at least one major change of direction over the 3.85m intervening from its point of intersection with U.3 on the west to the northeastern excavation margin. Approximately 1.5m northeast of U.3 the U.4 facing turns and runs southeast for 0.55m before heading northeast once again, this time for 2.8m. A low, stone-faced terrace (U.20) projects 0.75-0.85m southeast of U.4 and extends 2.05m northeast in front of U.4's southeast projection. This terrace is succeeded immediately on the northeast by yet another addition to U.4 (U.21). Unit 21 is a 1.05m-wide (northwest-southeast) by 1.3m-long (northeast-southwest) staircase composed of four low stone risers backed by treads that are 0.2-0.35m wide. The stairs may have been built in two sections, the southwestern-most 0.92m being first, later extended by the addition of 0.38m to the northeast. This renovation, suggested by a change in construction, may have coincided with a possible northeastward expansion of U.4. The aforementioned architectural disjunction in U.21 lines up with what appears to have been U.4's original eastern corner. Unit 21, therefore, was apparently raised as a corner staircase, adjustments in its dimensions being made to maintain this relation to U.4 as the latter was enlarged. The northeastern extension of U.4 covers ca. 0.5m and is abutted by U.24, a low cobble wall that runs across the northeastern margin of U.21. Unit 24 projects at least 0.95m southeast of U.4 (its southeastern end was not clearly identified). The up to 0.3m of dirt separating U.24 from U.21's risers contains a dense concentration of artifacts and bajareque fragments, tentatively suggesting that it consists of midden debris recycled as fill supporting U.24. The last element may be part of a basal facing for Str. 59-1st, the surface-visible remains of which lie immediately to the northeast. If this is the case, Strs. 58-1st and 59-1st may have

been linked during their final construction stages.

A 0.24m-high (above S.2, 0.48m high overall) stone projection (U.19) juts 0.7-0.9m southeast of U.4's southwestern section. Sandwiched between the no-longer visible U.3 and U.20 on the southwest and northeast, U.19 measures 0.5-0.7m wide. Unit 19 is fashioned of cobbles set on end. The 0.5m wide space intervening between U.4 and 20 on the northeast and U.19 was filled with a dense deposit of marine shell (primarily conch) debris.

Access to Str. 58-1st's superstructure on the northwest was by means of a formal entryway bounded by 0.1m- and 0.22m-high cobble walls (U.15 and 17). These constructions extend 1.85-2.1m southeast from the northwest basal facing (U.5) and border a stone-floored passage (U.16) that is 1.15m wide. Unit 15 is the higher of the two flanking constructions and is also the most extensive, measuring at least 2.75m across. Its southwestern companion encompasses 1.2m northeast-southwest, ending in the 0.2m rise of U.18. The latter is at least 1.2m wide and extends about 1.5m northwest from Str. 58-1st's superstructure's northwest footing (U.6). Unit 18 may be a shelf or bench placed under the eaves of the roof shading the platform's summit.

The superstructure itself consists of three rooms set in a northwest-southeast line and delimited by stone foundations that are 0.2-0.45m high by 0.3-0.45m wide (U.6-12). A 1.9m-wide dip of 0.25m in the top of the northwestern foundation (U.6) lines up with the entry feature discussed above and may have been a doorway leading into the northwest room. A step up of ca. 0.3m from U.16 to the top of U.6 in this dip would still have been necessary to negotiate the putative passage. Feature 2, a fragmented but still articulated cut block, is set into the floor of the northwestern room 0.44m southeast of, and near the axis of, the northwestern "doorway." The stone measures approximately 0.6m on a side and may represent an entry feature comparable to those found in other buildings at La Sierra and elsewhere in the Naco valley. A 0.55m-wide lowering of the southeastern foundation (U.8) near its southern corner indicates another door, this one providing direct access to the southeastern enclosure.

The northwestern room measures 1.7x4.95m and contains two stone-faced benches (U.13 and 14). Unit 13 is an L-shaped construction that takes up the entirety of the compartment's southwest wall and extends 2.2m along the southeastern foundation. The southwestern component is 0.65m wide, its southeastern counterpart measuring 1m across. Unit 14 is built into the northeastern footing (U.7), covers 1.15x1.6m, and continues into the central room. The latter cubicle measures 0.5x1.3m and is entered from the northwestern enclosure through a 0.45m-wide door created by a gap between U.10 and the U.14 bench. A total of five polyhedral obsidian cores was found in this space. The central room was created by a 1.96m extension of U.10 (the latter augmentation is indicated by a dramatic construction change) and the raising of U.11 and 12. Walls bounding the central room are relatively shallow, their bases resting 0.2-0.58m above those of the superstructure's perimeter footings (U.7-9). Such relations suggest that the central enclosure is a relatively late addition. Prior to this renovation, movement between the northwestern and southeastern rooms may have been largely unimpeded.

The southeastern enclosure covers roughly 6.4m² and lacks any built-in furniture. A 0.25m-wide "passage" between this and the central room is located near the latter's southern corner. This gap was filled in near the end of the occupation sequence, access to the central cubicle now only achievable from the northwest.

Room floors seem to have consisted of a foundation of stones mixed with earth. In the southeastern compartment, a 0.07m-thick deposit of moderately coarse-textured, soft-compacted, orange soil (F.3) overlies portions of this indistinct surface. Feature 3 may be a remnant of the

original living surface or deteriorated bajareque originally derived from the superstructure's walls.

Two low terraces (U. 22 and 23) front the superstructure's southeastern footing (U.8). Unit 22 extends 1.05m southeast of the summit construction's eastern corner, encompassing 2.1m northeast-southwest. Unit 23 is 0.45m further to the southeast and measures 0.6-0.95m wide by 2.7m long. The relationship between U.23 and the rest of Str. 58-1st's architecture was not resolved on the southwest, suggesting that this end was either left open (precluding U.23's use as a terrace) or construction here was so poorly preserved that it went unnoticed. Low cobble walls 0.2m and 0.3m wide (U.25 and 26) project 1.1m and minimally 1m southwest and northeast of Str. 58-1st's superstructure, respectively. Unit 25 intersects the summit construction's southern corner (the junction of U.8 and 9) while U.26 disappears beyond our excavation limits from its point of intersection with U.7, 0.25m northwest of the superstructure's eastern corner. Though only partially investigated, U.25 and 26 seem to be foundations that delimit enclosures that adjoin Str. 58-1st's superstructure on the northeast and southwest.

Structure 58-1st is a 0.14-0.38m-high platform built off the northeast side of an earlier edifice (Str. 19-Sub11-1st). The edifice's basal northwest-southeast basal dimension is 9.55m, measured across the center and including the U.20/21 projections, and the building is oriented roughly 253 degrees, 30 minutes. Access to the summit rooms was achieved via a corner staircase on the southeastern, patio-facing flank and along a 1.15m-wide, stone-floored corridor bounded by extensive, elevated stone surfaces on the northwest. The aforementioned superstructure is delimited by low stone foundations and consists of three compartments that vary considerably in size. The northwestern enclosure is the largest, covering 8.4m², and contains two stone-faced benches. An L-shaped bench takes up all of the southwestern and much of the southeastern walls while a second elevated surface is built into the northeastern footing. A 1.9m-wide dip in the northwestern foundation aligned with the aforementioned entry corridor probably marks the doorway into this room, an interpretation that is also suggested by the recovery of a cut stone block set into the compartment's floor on the doorway's approximate axis. The southeastern room is also extensive, encompassing 6.4m², is entered through a 0.55m-wide door in the southern corner, and lacks built-in furniture. Relatively late in the construction sequence, a cubicle measuring 0.7m² was erected between these two rooms. Originally accessible from both the northwest and southeast, the central room's southeastern "passage" was eventually sealed, its contents now apparently retrievable only through the 0.45m-wide aperture on the north. The bench set into the northwest compartment's northeast wall extends into the central cubicle. Two low, possible terraces project southeast of the superstructure while two stone constructions are appended to the platform's southeastern basal wall. One of these, U.19, seems to have been a locale favored for the fashioning of artifacts from marine shell, or at least delimits what was a dumping ground for debris resulting from this activity. Yet another bench or shelf appears to have been built under the eaves of the superstructure's roof atop the broad northwestern summit. Additional rooms, bounded by low stone foundations, seem to have been appended to the superstructure's southwestern and northeastern flanks. All foundations and facings are built primarily of unmodified cobbles, their naturally flatter aspects oriented outwards. Feature 2 consists of a single cut block while masonry is incorporated with cobbles in U.17. Horizontal coursing is not clearly attested in most walls, though chinking stones are fairly common components of most foundations and footings. Stones are set horizontally in all cases save U.19 where the rocks are placed vertically. A brown mud mortar was used in all cases as a binding agent.

Time Span 4

Following abandonment, Str. 58-1st was blanketed by the natural deposition of S.3 and 4, moderately coarse-textured, hard-compacted soils that are distinguished by overlying S.4's darker brown hue and greater concentration of small roots. Strata 3 and 4 accumulated to a total depth of 0.3-0.57m over S.2 and covered all but the uppermost stones of Str. 58-1st's architecture. Rocks fallen from final-phase construction (F.4) were found overlying the building and extending in a light to moderately dense concentration for 1.4m southeast of the platform and 1.02m to the northwest.

Structure 59

Structure 59, lying 5m north of Str. 60 and 3m east of Str. 58, seals off the northeast corner of the Op. 19 plaza. The terrain here is relatively level, sloping up very gradually from south to north. Only a very limited portion of Str. 59's southeast facing was revealed as a byproduct of more extensive clearing operations conducted on and around Str. 60 (Subops. 19H and I, in particular). Approximately 4m² of prehistoric deposits were dug in the course of this work, excavations being carried down to a maximum depth of 0.7m below modern ground surface outside construction (architectural fill was not investigated). A single building phase was revealed in the course of this work which was overseen by M. Yeager.

Time Span

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1	-	LCLI/II?
2	Str. 59-1st	U.1,2	-	F.1	LCLII/III?
3	-	-	S.2,3	F.2	-

Time Span 1

Stratum 1, a moderately coarse-textured, hard-compacted, tan soil, buries the lower 0.33m of Str. 59-1st's southeast basal facing (U.1). It is unclear how much of S.1 was laid down prior to the building's construction and how much accumulated during and after the edifice's use. Recovery of artifacts from all excavated depths within S.1, however, suggests a human presence in the area while this soil level was being deposited, including the period prior to Str. 59-1st's erection. Stratum 1 appears to be a continuation of the earth glossed as S.4 in the Str. 60 excavations (see below, TS.3).

Time Span 2

Structure 59-1st is represented solely by a 1.8m-long fragment of its southeast basal

facing (U.1). Unit 1 stands 0.31m above S.1, is 0.47m-wide, and aligned roughly 62 degrees 30 minutes. A break in construction ca. 1m northeast of U.1's exposed southwestern edge implies that the facing was built in two stages, the northeastern portion apparently being the earlier of the two segments. A cobble surface (U.2) lines up with the aforementioned architectural disjunction, projecting 0.75m southeast of the break in U.1 and then cornering to run at least 0.7m to the northeast. It appears that when U.1 was extended to the southwest the U.2 floor was not expanded. Unit 1 is fashioned primarily of unmodified river cobbles measuring 0.02x0.05m to 0.13x0.27m. A single cut block, encompassing 0.12x0.35m, was incorporated into the northeast side of U.1's architectural break, possibly having capped Str. 59-1st's original southern corner. The larger U.1 stones are set in three horizontal courses and packed round with chinking stones, the latter also serving as the wall's foundation. A brown mud mortar is used as a binding agent.

A 0.04m-thick by 0.4m-long lens consisting of a dense concentration of ceramics suspended in a moderately coarse-textured, hard-compacted, tan soil (F.1) lies atop S.1 0.49m southeast of U.1. Feature 1 conforms to the northwest-to-southeast downward slope of S.1 in this area and may represent debris deposited near the end of Str. 59-1st's use-life.

Time Span 3

Following abandonment, Str. 59-1st was blanketed by the natural deposition of S.2 and 3. These moderately coarse-textured, moderately hard-compacted soils are distinguished by overlying S.3's darker brown hue and greater concentration of small roots. Together, S.2 and 3 cover S.1 by 0.33-0.64m. Embedded in S.2 in particular are stones displaced from final-phase architecture (F.2.). Feature 2 extends for ca. 1m southeast of U.1.

Structures 60, 19-Sub1/7

Structure 60 closes off the eastern side of the patio defined by Strs. 57-62. Structure 59 is 5m to the north, Str. 62 an equivalent distance to the southwest (based on the surface-visible limits of all three edifices). The ground here slopes up ca. 0.5m over 15m northeast-to-southwest and 0.6m across 9.64m southeast-to-northwest. In the course of exposing Str.60, remnants of at least seven additional buildings not identified on ground surface were uncovered lying immediately northeast of the building (Strs. 19-Sub1/7). Erection and use of most of the newly uncovered edifices seem to predate construction of Str. 60's final version. Understanding temporal and architectural relations among the various investigated edifices, however, is easiest when treating them together. Consequently, all seven buildings are discussed under a single heading. The complex composed of Strs. 60 and 19-Sub1/7 was uncovered during the excavation of roughly 75m² within Subops. 19H, I, and M. Digging was carried down to maximum depths of 1.1m below modern ground surface outside construction and 0.9m beneath ground level into architectural fill. A single major building phase, associated with numerous renovations, was recognized for Str. 60 whereas a set of distinct constructions enjoying complex temporal relations was noted lying northeast and immediately southwest of that edifice. The investigations were supervised by E. Yeager during the 1990 field season.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1	-	-
2	Str. 19-Sub1-1st	U.1	-	-	MPrecl?, LCLI?
3	-	-	S.2,4	-	LCLI,II/III
4	Str. 19-Sub2-1st Str. 19-Sub3-1st Str. 19-Sub4-1st Str. 19-Sub5-1st Associated NE constructions	U.2 U.6-12 U.18 U.19 U.3-5, 13-15	S.2 - - - -	- - - - -	LCLII/III
5	Str. 19-Sub6-1st Str. 19-Sub7-1st	U.20 16,17	S.2,3,5,6	F.1	LCLII/III
6	Str. 60-1st	U.21-29,32 33,34,36,39	-	-	LCLII/III
7	Str. 60-1st	U.30,31,35, 37,38,40-48	S.7?	F.2,3,6	LCLII/III
8	-	-	S.3,7,8	F.3,4,5	-

Time Span 1

Stratum 1, a coarse-textured, soft-compacted, orange-brown sand, underlies TS.2 construction by at least 0.27m and was found 0.09m beneath TS.4 architecture (U.14). This layer was exposed to a maximum thickness of 0.27m (S.1's base was not revealed). Stratum 1 was uncovered only at the base of excavation northeast of Str. 60, digging not being carried to sufficient depths elsewhere to test for S.1's presence and depth. The absence of cultural materials within the investigated segments of S.1 hints at a lack of significant human occupation in the immediate environs when this soil was being laid down. Admittedly, further excavation of S.1 might well change that impression.

Time Span 2

Structure 19-Sub1-1st, ca. 3m northeast of Str. 60-1st, is represented by what appears to be a foundation protruding 0.02-0.05m into S.1 and composed of relatively large (0.11x0.27m to 0.11x0.48m) unmodified river cobbles (U.1). Unit 1 was traced for 1.2m northeast-southwest (oriented roughly 55 degrees) and rises 0.06-0.1m above S.1. The footing's width was not ascertained. Most likely, Str. 19-Sub1-1st was a surface-level building a portion of whose

southeast perimeter we exposed in our excavations. This represents the earliest architecture identified in Subops. 19H, I, and M.

Time Span 3

Following Str. 19-Sub1-1st's abandonment it was blanketed by the deposition of a fine-to-moderately fine-textured, soft-compacted, brown to orange-brown soil (S.2). Stratum 2 continues to accumulate in TS.5, making it difficult to decide how much of this earth layer pertains to the current interval. Approximately 0.1m of S.2 intervenes between the top of U.1 and the base of its immediate successor, U.2, implying that at least this much of S.2 was introduced during TS.3. Recovery of artifacts from lower S.2 indicates a continuing human presence during the deposition of this level.

Stratum 4, a moderately coarse-textured, moderately soft-compacted, tan soil, buries the bases of architecture pertaining to TS.4 on Str. 60-1st's southwest flank (U.18 and 19). This earth layer was exposed to a maximum thickness of only 0.09m (the base lying beyond excavation limits) and we cannot be certain whether it contained cultural material.

Time Span 4

This interval witnessed a marked quickening of architectural activity within the excavated area. On the northeast, at least two edifices (Strs. 19-Sub2-1st and 19-Sub3-1st) were raised at this time along with a series of other constructions (U.13-17) whose relations to the uncovered buildings remains unclear. Examination of stratigraphic relations among U.2-17 suggests that not all were raised and in use simultaneously. Instead, TS.4 seems to have been a protracted span during which buildings northeast of Str. 60-1st were erected, used, fell into disuse, and were gradually replaced. The situation on the southwest is far less clear. Here, only limited portions of two edifices (Str. 19-Sub4-1st and 19-Sub5-1st) were found projecting out from beneath Str. 60-1st. How these constructions relate to those unearthed downslope to the northeast remains uncertain, inclusion of all the listed edifices within TS.4 being tentatively based on stratigraphic positions that indicate their abandonment prior to the Str. 60-1st's erection.

Structure 19-Sub2-1st is represented by a 0.11m-high cobble wall (U.2) located 0.12m southwest and 0.1m above U.1. Like its predecessor, U.2 appears to have been a foundation defining the southeast flank of a surface-level edifice. Unit 2 was traced from its apparent east corner for 1.5m southwest (oriented approximately 250 degrees). Unit 2 was followed for only 0.3m to the northeast from the east corner. There was no sign of a corner at the footing's southwest end, U.2 simply stopping ca. 0.1m shy of U.3. The latter is a cobble riser built into the northeast-to-southwest slope of the land. Unit 3's base is 0.06m above that of U.2 and it stands to a preserved height of 0.21m. This apparent terrace face was traced for 2.6m northwest from its junction with U.4 on the southeast, though it may well continue beyond excavation limits in the former direction. Unit 3 is aligned roughly 340 degrees. It may be that U.3 served as Str. 19-Sub2-1st's southwest foundation, though only further excavation along the riser's northern extent could help evaluate such a proposition.

On the southeast, U.3 intersects U.4, a 0.1m-high cobble wall that extends 1m northeastward between its junction with U.3 and 5. The latter stands a preserved ca. 0.4m high and continues 1.2m southeast to where it joins U.7. The net effect of these connections is the

creation of a terrace whose southern end dog-legs to the northeast. Differences in observed height may well be an outcome of variable preservation. Unit 5 rides over the top of U.6, indicating that the former's construction (perhaps the entire U.3-5 complex) postdates the raising of Str. 19-Sub3-1st.

Structure 19-Sub3-1st is a 0.16-0.26m-high, stone-faced platform defined by single, vertical facings on its exposed northwest (U.6), northeast (U.8), and southeast flanks (U.11); no link was clearly established between U.8 and 11 to form the building's putative east corner. Unit 8 continues at least 1.7m beyond its expected east corner, forming a ca. 0.2m-high by 0.95m-wide cobble wall backed by U.10 on the southwest and continuing for an undetermined distance to the southeast. There are no clear signs that U.10 is a late addition to Str. 19-Sub3-1st. Instead, it appears to have been part of the original construction, though its architectural significance is unclear. Possibly, it defines the southwest flank of a passageway into Str. 19-Sub3-1st.

A single room (all of its elements glossed as U.12) was located atop Str. 19-Sub3-1st. This enclosure has a rough C-shape, the figure tilting down to the southeast, and its cobble-surfaced floor is set 0.09m below the stone paved summit (the summit pavement is U.9). The cubicle covers ca. 2.1m² and is delimited by low cobble walls that do not protrude above U.9. Two of these elements rest on the U.12 floor while the remainder extend beneath it. Unit 7 is a substantial (ca. 1.1m-wide) wall that rises 0.4m above Str. 19-Sub3-1st's summit. This entity terminates 0.1m southwest of the U.12 enclosure and continues at least 2m southwest to the point where it is abutted by U.5 (U.7 may continue further in this direction, though this was not established by excavation). Units 7 and 12 are the only constructions associated with the use of Str. 19-Sub3-1st's summit during TS.4.

Lying 0.6m northwest of Str. 19-Sub3-1st is a quadrilateral construction fashioned of cobbles and masonry blocks set vertically (U.13). Several of the stones were blackened, as if from burning. Unit 13 measures 1.15x1.36m and contains a fill composed of cobbles, pebbles, and pottery sherds set in a brown soil matrix. (all glossed as U.13). The entity stood 0.18m above S.2, its stones projecting down ca. 0.15m through that level and into S.1. A line of three cobbles was set largely within S.1 against the southeastern base of U.13, possibly to enhance the construction's stability on this side. Unit 13's base is 0.14m below that of U.6 while the tops of the two elements are roughly equivalent. The greater depth of U.13's bordering stones may result from the need to wedge these slabs deep within the earth to ensure their stability. Most likely U.13 and U.6 were built at about the same time.

Approximately 0.75m northeast of Str. 19-Sub3-1st is a cobble surface (U.14) the base of which is 0.16m above that of U.8. Unit 14 is one stone (ca. 0.1m) thick, runs more-or-less parallel to U.8, and covers roughly 2m northeast-southwest (the northeast edge is eminently unclear). Given the observed stratigraphic relations, it appears that U.14 was introduced after Str. 19-Sub3-1st had been built. It may even be the case, seeing as the top of U.14 is ca. 0.05m above that of U.9, Str. 19-Sub3-1st's summit pavement, that most of the latter building was already buried by S.2 before U.14's appearance. Perhaps U.9 alone remained exposed.

Unit 15, a 0.07m-thick cobble surface, abuts Str. 19-Sub3-1st's north corner and runs at least 0.6m northeast towards U.14. The base of U.15 is 0.13m above that of U. 8, suggesting that this is yet another relatively late addition within TS.4. Most likely, U.15 marks a southwestern extension of the U.14 pavement, linking the latter with those portions of U.9 that might still have been exposed.

Only two architectural elements found Southwest of Str. 60-1st are tentatively assigned to

TS.4 (U.18 and 19). These cobble walls stand at least 0.42m (U.18) and 0.35m high (U.19; the bases of neither entity were uncovered, though they both continue down into S.4), project 0.58m and 1.74m southwest, respectively, from under Str. 60-1st's west flank (U.33). Units 18 and 19 are separated by a scant 0.37m north-south and may be parts of two closely spaced, contemporary constructions (Strs. 19-Sub4-1st [U.18] and 19-Sub5-1st [U.19]).

Northeast of and downslope from the area eventually occupied by Str. 60-1st, a warren of humble constructions was constructed and modified throughout TS.4. The first identified construction raised in this area appears to have been Str. 19-Sub3-1st. This 0.18-0.26m-high cobble-faced and -surfaced platform measures 3m across northwest-southeast by at least 4.4m northeast-southwest and is aligned roughly 248 degrees. A 0.2m-high by 0.95m-wide wall extends minimally 1.7m southeast from the building's inferred east corner and seems to have been integral to the original construction. Atop the platform, a stone-paved, C-shaped room covering 2.1m² is set 0.09m below summit level. The only other summit feature is a 1.1m-wide by 0.4m-high cobble wall (U.7) that runs at least 2m northeast-southwest from a point immediately southwest of the aforementioned room. This wall, wide and long enough to qualify as a bench, rests on Str. 19-Sub3-1st's summit and may be a late addition, possibly contemporary with the next round of construction. Roughly contemporary with the platform is a quadrilateral construction (U.13) measuring 1.15x1.36m that is fashioned of vertically set stones that enclose an artifact-rich earth-and-stone fill. This entity is 0.7m northwest of Str. 19-Sub3-1st and stood roughly 0.32m high. Activities associated with the above unit apparently involved burning as several of the component rocks were charred black.

The bases of Str. 19-Sub2-1st, the U.3/5 terrace, and the pavement extending northeast of Str. 19-Sub3-1st (U.14/15) all rest 0.13-0.25m above those of Str. 19-Sub3-1st and U.13, suggesting that their construction comes near TS.4's conclusion. It may well be that the platform was buried now by the purposeful introduction of 0.18-0.26m of S.2 soil, leaving only its cobble pavement exposed. The cobble surface represented by U.14 and 15 may, in fact, have been laid down in an effort to create an extensive paved area (ca. 7.15m northeast-southwest) that incorporated Str. 19-Sub3-1st's summit. Unit 13 might also have continued to project 0.06-0.14m above this new living surface, though whether it was still used is far from certain. Unit 7, the substantial stone wall found atop Str. 19-Sub3-1st, may also have been raised at this time. Not only does U.7 rest on the platform's summit but it and the southeastern terrace (U.3/5) appear to have been built as a unit. The latter is a 0.1-0.4m-high stone facing that was raised near the base of the southeastern slope, probably to slow erosion down that flank. Structure 19-Sub2-1st, a modest surface-level building measuring approximately 1.5m northeast-southwest and oriented ca. 250 degrees, was seemingly built up against this terrace on the northwest.

By the end of TS.4, therefore, the exposed area consisted of an earthen-floored patio bounded on the northwest, southwest, and southeast by a: surface-level building (Str. 19-Sub2-1st), low terrace (U.3/5), and an extensive stone surface containing a C-shaped room and supporting a sizable wall near its southwestern terminus. Unit 13 may still have protruded slightly above the newly augmented living surface in the patio's approximate center. Insufficient excavation was undertaken to determine the presence of architecture along the patio's northeast margin.

Further to the southwest, remains of at least two stone constructions were recorded (Strs. 19-Sub4-1st and 19-Sub5-1st). These closely spaced edifices may have been part of yet another building complex or an extension of the aggregate described above. Given the restricted nature of excavations here, all that can be said is that identification of Strs. 19-Sub4-1st and 19-Sub5-

1st imply that a substantial, tightly nucleated settlement which covered very roughly 17m northeast-southwest predated Str. 60-1st's erection.

All TS.4 foundations, facings, and pavements were made primarily from river-rounded cobbles the naturally flatter faces of which are generally oriented outwards. Cut blocks (three), as noted, were used in the construction of U.13, and one appears in Str. 19-Sub2-1st's U.2. Horizontal coursing of the larger rocks was noted on U.18 and 19; the other footings/facings are so low that they render identification of this feature impossible. Chinking stones commonly fill gaps between sizable rocks and a brown mud mortar is used everywhere as a binding agent. Rock sizes (excluding chinking stones) range from 0.03x0.05m to 0.12x0.52m, with most falling towards the middle of that range.

Time Span 5

This interval witnessed large-scale infilling northeast of Str. 60. The process began with S.2's continued accumulation. This earth level eventually blankets Str. 19-Sub2-1st's U.2, the southeastern terrace (U.3), and Str. 19-Sub3-1st; it is not found covering the U.14/15 pavement nor does it obscure U.5. Stratum 2 now ascends 0.25m across 4.64m northeast-to-southwest.

Subsequently, all identified construction was buried beneath a dense deposit of artifacts (mostly pottery sherds) and gravel suspended in a coarse-textured, hard-compacted, brown soil matrix (F. 1). Feature 1 ranges in thickness from 0.04-0.34m and slopes down 0.24m across 4.1m southwest-to-northeast and 0.53m over 1.8m northwest-to-southeast (near the northeastern excavation limit F.1 drops only 0.03m across 1.68m northwest-to-southeast). This deposit is especially clear on the northwest where it includes a tightly packed collection of medium-size cobbles measuring altogether 0.37x0.85m. This aggregate sits above U.2's northeast end but is not connected to that construction. The sherds incorporated in F.1 both underlie and slope up towards and down away from the above stones. Feature 1 is thickest immediately behind (southwest of) the cobbles. Taken together, these observations suggest that the rocks were introduced during the course of F.1's deposition, eventually serving as an obstacle to the downslope flow of cultural materials. There is no evidence that the stones in question were part of a formal construction and their presence within F.1 remains an enigma. At the very least, however, the patterned distribution of materials around the cobbles hints at a protracted period for F.1's deposition, an interval in which debris gradually accumulated below and, later, behind an obstruction. Feature 1 is much thinner on the southeast where it collected to depths of 0.04-0.15m over all of Str. 19-Sub3-1st and lapped over and onto the northeastern 0.4m of the U.14 floor. A total of 0.15m of this debris accumulated at the base of the U.7 wall. Feature 1's behavioral significance is unclear. The element's stratigraphic importance lies in its sealing most TS.4 construction, providing a distinctive barrier segregating this architecture from that pertaining to later periods.

Covering F.1 is at least 0.04m of S.3, a coarse-textured, hard-compacted, brown soil containing far fewer artifacts than its nearly identical predecessor. Because S.3 continued to collect after Str. 60-1st's abandonment, it is difficult to ascertain how much of it accumulated during TS.5. The 0.04m figure represents the amount of S.3 intervening between F.1 and the base of Str. 60-1st's northeastern-most architecture. As noted below, ca. 0.3m of S.3 was apparently laid down during TS.5. This discrepancy likely follows from the northwest-to-southeast downward trend of the land, seen most clearly in the relatively rapid fall-off of F.1 in

this direction. More of S.3 accumulated on the lower portions of this incline than on its upper reaches.

Units 18 and 19 on the southwest were buried by two very similar soil levels. Stratum 5, a gritty, sandy, moderately soft-compacted tan soil containing some bajareque fragments, covers S.4 by 0.19-0.2m and is, in turn, blanketed by a moderately coarse-textured, hard-compacted, tan earth (S.6) very similar to S.4 and reminiscent of S.3. It may be that S.6 is the southwestward continuation of S.3; both continuing to be deposited in TS.7 after Str. 60-1st's abandonment.

Early on in the process of S.6's introduction, U.20 was constructed. This cobble facing is 0.24-0.27m high and may have been backed over at least 1.23m to the southwest, away from Str. 60-1st, by a stone pavement (included in U.20; this surface is not clear). Unit 20 runs over U.19 and was traced for 1.1m northwest-southeast before limits on time precluded further clearing. Most likely, U.20 is the northeastern basal facing of a 0.27m-high platform (Str. 19-Sub6-1st) that is oriented very roughly 339 degrees.

Units 16 and 17 (Str. 19-Sub7-1st) are two poorly understood stone constructions that are set in S.3 northeast of Str. 60-1st. Unit 17 was exposed running for 1.6m at an azimuth of ca. 329 degrees immediately below and northeast of Str. 60-1st's U.21. Unit 17's base steps down 0.27m over this distance, its stop generally following suit. Possibly, U.17 consists of two heavily disturbed steps or terraces that mount in increments of approximately 0.2m from northwest-to-southeast. If this interpretation is correct, the tread backing the basal step-up is 0.84m wide. Unit 16, which extends 1.9m northeast from its near right-angle corner with U.17 at the latter's northwest end, might then represent the continuation of the basal riser in this direction. Unit 16 intersects U.5 on the northeast, that former terrace component possibly serving now as part of the Str. 19-Sub7-1st's platform's northeast face. The southeastern terminus of U.17 is unclear nor can we be certain that additional portions of Str. 19-Sub7-1st do not lie buried beneath Str. 60-1st on the west. Overall, Str. 19-Sub7-1st is tentatively interpreted as a stone-faced platform built into a northeast-to-southwest upward slope, ascended by two low risers on the northwest that reach a reconstructed height of 0.4m. The building is aligned approximately 329 degrees.

All TS.5 facings were built of unmodified river cobbles, their naturally flatter aspects directed outwards, set in a brown mud mortar. Chinking stones were used sparingly and horizontal coursing of the larger rocks is only tentatively identified for U.20.

Following abandonment of Strs. 19-Sub6-1st and 19-Sub7-1st, roughly 0.3m of S.3 (on the northeast) and 0.24m of S.6 (on the southwest) accumulated. These soils buried all but the uppermost stones of both edifices. The putative stone pavement capping Str. 19-Sub6-1st may have remained visible at the beginning of TS.6, possibly now serving as a pavement fronting Str. 60-1st. Builders of Str. 60-1st's northeastern perimeter used U.17's highest rocks as a foundation for the edifice's northeastern perimeter wall (U.21).

Time Span 6

Structure 60-1st is a surface-level building perched on the edge of a gradual drop-off to the northeast. The building achieved its final form over the course of several stages. During the first of these it was defined by carefully constructed, variably wide stone foundations on the northeast (U.21), northwest (U.22 and 32), and southwest (U.33). Unit 21 is a particularly intriguing construction, its northeastern (exterior) face rising ca. 0.4m while its southwestern side is at least 0.64m high (the base was not encountered on this flank). Construction styles also

differ on the northeast and southwest, the latter consisting of four clear horizontal courses of cobbles densely packed round with chinking stones while the former appears more as a barely consolidated jumble of unmodified rocks underlain by smaller cobbles and a level of pottery sherds. The reasons for these disjunctions are not clear. Unit 21 is too narrow (0.4-0.7m across) to contain an earlier wall later augmented on the northeast, nor is there any sign that such an addition was ever made. The observed differences in basal elevation might, however, be an adaptation to coping with erosion down the northeastern slope. The interior flank may have been dug deep to stabilize the foundation's core, the outer face more casually fashioned and resting atop current ground surface. The same pattern of well-built inner/more casually fashioned outer walls seems to pertain on the northwest. Here, 0.4m-wide U.22 combines with 1.35m-wide U.32 to create an inset north corner measuring 1.45x0.9m. Unit 32's considerable width hints at its having served as something more than just a support for perishable upper walls. Perhaps it was used as a bench in addition to its load-bearing function. Unit 33 is 0.35-0.45m wide; U.22, 32, and 33 are preserved to 0.6-0.74m high. Structure 60-1st's southeastern perimeter wall is not clear. In fact, there are only the faintest indications of its original placement and the footing may have been ripped out prior to the next round of re-modelling. A subtle change in construction near U.21's southeast end coincides with a ragged termination in the schist-and-cobble floor (U.25) that surfaces Room 1. The latter feature may mark the location of the southeastern footing. The wall that defines Room 1's southeastern border during the final construction phase (U.26) is almost certainly a late addition, its base sitting 0.06-0.07m above and 0.25-0.35m southeast of U.25 (the other three walls that delimit Room 1 extend below U.25). It seems likely, therefore, that the southeastern foundation for this version of Str. 60-1st originally ran along U.25's southeastern boundary and was later removed when the edifice was expanded in this direction. Southwest of Room 1, U.26 may well be part of the original foundation. This surmise is tentatively suggested by changes in construction, especially U.26's more substantial appearance where it borders Room 2 southwest of Room 1. In computing Str. 60-1st's initial dimensions, therefore, we postulate that the southeastern footing was ripped out on the southeastern margin of Room 1 but retained elsewhere along U.26.

The building's interior is partitioned into three rooms. Room 1, in the east quadrant, encompasses 1.6m on a side, is delimited by cobble foundations on all sides save the southeast (see above, U.21, 24, and 27), and is floored with a pavement comprised of densely packed schist slabs and cobbles (U.25). Units 24 and 21 are 0.76m and 0.46m high, respectively, and protrude an unknown distance beneath the U.25 floor. Unit 27, on the southwest, is much thinner (0.17m wide as opposed to 0.4 and 0.7m across for U.24 and 21) than its counterparts and does not seem to have had a clear back (southwest) side. Rather than being a free-standing, load-bearing wall, U.27 may have faced a 0.24-0.6m-high step-down from Room 2 on the southwest. There is a 0.8m-wide section in U.27's approximate center where the differences in elevation between the enclosures is only 0.24m, this segment possibly marking a doorway.

Room 2 is an earthen-floored enclosure that covers 1.2x2.2m (estimating where the southern boundary falls based on arguments presented above). It is bordered on the southwest by U.28. This construction stands 0.5m high and is backed on the southwest by a stone pavement (U.39) extending for 1.9m to U.33. This construction creates a stone-surfaced platform covering 1.9x3.35m (maximum) in Str. 60-1st's south quadrant. A niche (U.29, encompassing 0.5x0.65m) is built into the approximate center of U.28. Most likely U.28 functioned as a bench overlooking Room 2.

A 0.85m-wide doorway may have breached the northwest room wall (a gap between

U.24 and 38 on the northeast and southwest). This passage leads into Room 3. The northeastern segment of this compartment encompasses 1.7x2.3m and has a small (0.3x0.6m, measured across the entrance) niche built ca. 0.2m above floor level into its north corner. A 0.55m-high cobble facing (U.23) in Room 3's northeast end defines the margins of an earthen-surfaced bench. This construction is 1.2m wide by 1.9m long, its earth fill retained by U.21, 22, and 24 in addition to U.23. At the opposite end of the enclosure, a 0.2m-high by 0.3m-wide cobble threshold (U.36) separates the northeastern segment from a much smaller (0.65x1.5m) cubicle on the southwest. The latter is completely paved with schist slabs (U.34). Because we could not definitively locate Room 3's earthen floor, we cannot say whether it rested at the same level as U.34 or was even with the top of U.36. If the latter was the case, passage into the paved southwestern segment would have involved stepping down ca. 0.2m.

By the conclusion of TS.6, Str. 60-1st was a surface-level edifice measuring 5.15x5.4m, oriented 337 degrees, and containing three rooms. Northwestern Room 3 contains 4.9m², including the schist-paved cubicle in the southwest but excluding the 0.55m-high bench that takes up the entirety of the compartment's northeast wall. Said bench covers 1.2x1.9m and, like most of Room 3, is surfaced with earth. A 0.85m-wide door in the enclosure's southeast wall provides access to Room 2. This compartment encompasses 2.6m² of earthen-floored space and is backed on the southwest by a substantial stone-surfaced construction that is 0.5m high and measures 1.9x3.35m. The general dimensions of this entity suggest its use as a bench. Northeast of Room 2, Room 1 contains 2.6m² of schist-and-cobble-paved space set roughly 0.24m below the reconstructed level of the adjacent Room 2 floor. Movement between these two compartments was through a 0.8m-wide door set in the approximate center of their shared partition. Facings and foundations pertaining to this version of Str. 60-1st are made primarily from unmodified river cobbles whose naturally flatter aspects were placed facing outwards. The larger rocks tend to be set in clear horizontal courses packed round with large numbers of chinking stones. Exceptions are U.21's northeast face which, as noted earlier, is casually fashioned and lacks coursing. Unit 27, the riser between Rooms 1 and 2, is built almost exclusively of small, tightly packed cobbles that are not set in horizontal rows. This element's inferred function as a step-down, rather than a support for upper walls, may have reduced the need to incorporate larger stones in its construction. Sizable rocks probably helped stabilize load-bearing walls. Rock sizes in general range from 0.07x0.1m to 0.19x0.32m.

Time Span 7

Renovations during TS.7 resulted in the considerable modification of Str. 60-1st's southwest and southeast sides along with some changes in the use of interior spaces. As discussed earlier, the wall bounding Room 1 on the southeast was likely ripped out now, replaced by a northeastward continuation of U.26. This extension is considerably narrower than its southwestern member (0.25m vs. 0.4m), stops 0.06-0.07m above the level of the enclosure's earlier floor (U.25), and rides over the top of the U.27 step-down. The above observations indicate that not only is U.26-northeast a relatively late addition but that its narrowness may imply that it was not intended to support upper construction. Instead, this element doubles as the northwest retaining wall for an elevated construction measuring 1.5m on a side. Said platform is retained on the northeast, southwest, and southeast by continuations of U.21, 27, and the newly built U.40, respectively. The last entity, together with U.41, consists of two low cobble risers that ascend 0.31m to the top of the eminence. The basal step's tread (U.41) is

0.35m wide. Beginning 0.2m southwest of the U.27/40 junction, U.40 is transformed into a single stone riser that continues the line of the upper step an undetermined distance to the southwest. Investigations of U.40 were limited and it is unclear whether Str.60-1st's entire southeast flank was now delimited by a low platform bordered by U.40 on the southeast.

The Room 1 floor was almost certainly raised during this span, though by how much remains uncertain. Roughly 0.2m of soil stained red, probably from decayed bajareque, covers U.25 (F.3). Tumbled architectural debris (part of F.4) rests atop this level, implying that F.3's upper surface may mark the level of the TS.7 Room 1 floor. It is also likely, however, that at least part of F.3 represents material eroding into the enclosure soon after abandonment but prior to the onset of major structural collapse. All we can say at present is that the Room 1 living surface was likely raised to accommodate the relatively shallow depth of U.26-northeast, part of that augmentation apparently involving the deposition of F.3. How much of that distinctive earth was introduced while the building was still in use remains uncertain. Wherever the floor may have been, the southeastward expansion of the compartment enhanced Room 1's size to 1.6x1.95m.

Unit 27 continues to divide Rooms 1 and 2, the latter's floor apparently being raised very roughly 0.07m at this time. This interpretation is tentatively advanced based on the presence of F.3 at this thickness in Room 2, the position of F.4 tumble atop F.3, and the position of U.30's base 0.07m above the bottom of the western bench (U.28). Unit 30 is a 0.15m-high stone-faced and -surfaced shelf that now fills the doorway between U.24 and 28. The shelf measures 0.47x1.25m and is backed by a semicircle outlined with cobbles (U.37). Unit 37 measures 0.5m across its exterior dimensions (0.3m on the interior) across its widest (southeastern) dimension. Unit 30 abuts U.24 and the newly constructed U.38, and is open to the southeast into Room 2. The semicircle's base is surfaced with cobbles (included in U.37). Unit 37 most likely served as a support for a large wooden center-pole that, in turn, was a crucial element in sustaining the roof.

Unit 38 is a 0.47m-high by 0.35m-wide cobble wall that fills in the southwestern portion of the earlier door. Room 2 was now sealed off from Room3, contained a possible bench (including a centrally located niche) along with a small shelf, and measured 1.2x2.2m (including U.30).

Room 3 also came in for its share of remodeling. The entire floor area was raised ca. 0.2m by the introduction of a moderately coarse-textured, hard-compacted, tan soil (U.48). Because U.48 is virtually identical to the earth laid down after Room 3 had fallen into disuse, we cannot be sure whether the U.34 pavement was covered now or if it remained exposed. The very top of the U.36 threshold that borders U.34 on the northeast might have remained visible during TS.7. Rising approximately 0.3m above the earth floor northeast of U.36 is a stone-faced, earth-surfaced addition (U.47) to the northeast bench faced by U.23. Unit 47 projects 2.15m southwest from U.23's south corner and is 1m wide. Addition of U.47 further sealed the old doorway into Room 2 and created an L-shaped bench that takes up all of Room 3's northeastern, and about two-thirds of its southeastern, walls.

Returning to Str. 60-1st's exterior, the northwestern foundation, U.32, was extended 0.9m to the southwest (U.42) where it corners with U.43, the new southwest foundation. Unit 43 is 0.4-0.55m high, while U.42 rises no more than 0.25m. The difference in elevation may be a product of differential preservation. Backing U.43 to the northeast is a fill composed of cobbles set in a brown soil matrix (U.46). Unit 46 appears to bury U.33 (the southwestern foundation during TS.6) over the 4.2m north-south distance that U.43 covers. South of U.43, U.33

apparently continued to function as Str. 60-1st's southwestern footing. Unit 43 terminates at its junction with U.41, a 0.33m-wide by 0.33m-high stone wall that projects at least 1.9m southwest from U.33. Unit 41 does not seem to have been an integral part of Str. 60-1st construction and is probably a foundation for a surface-level building appended on to the main edifice's southwest flank. A conical-shaped intrusion measuring 0.28m across and 0.33m deep is located ca. 0.6m southeast of U.41 and 0.85m southwest of U.33 (F.6). Feature 6's northeast side is steeper and 0.08m lower than its southwestern counterpart, its top sitting at approximately the same elevation as the base of U.41. The architectural significance of F.6 is far from clear, but it may be the remains of a post hole associated with whatever construction is represented by U.41. The latter addition was made fairly late in the building sequence as U.41 rides over U.43. Unit 44 projects 2m northwest from U.41 and rises approximately 0.15m above the earth-and-stone surface backing the new southwestern foundation (U.43). In this area, close to Str. 60-1st's center-line, U.43 and 44 may have comprised a set of steps that are 0.3-0.4m wide and lead to the top of the U.28/39 "bench." From there, individuals may have stepped down into Room 2 by means of the niche set within that eminence (U.29) or, possibly, into Room 3. In the latter case, as much as 0.57m may have separated wall-top and floor (if U.34 was still exposed), making for a problematic passage.

Feature 2 may be the remnants of a perishable construction that was raised above Str. 19-Sub3-1st long after that edifice was abandoned. This element consists of an irregular-shaped expanse of burnt earth covering roughly 0.7x1.25m immediately south/southeast of U.7, overlapping the area formerly covered by the U.12 room. A round depression with a diameter of 0.15m found within F.2 may be the remains of a post hole. Roughly 0.13-0.3m of dirt (S.7) intervenes between Str. 19-Sub3-1st architecture and F.2. Either S.7's deposition began earlier off Str. 60-1st's northeast flank than it did elsewhere or F.2 is the decayed residue of an edifice that was erected and abandoned after Str. 60-1st was itself a ruin (S.7 covers portions of Str. 60-1st architecture). Approximately 0.25m of U.7 may still have been visible when the F.2 construction was in use, this substantial wall possibly having been incorporated into the late edifice.

Feature 6 is a purposefully shaped circular stone located 0.47m northwest of U.32's north corner. The stone has a diameter of 0.48m, is fractured, and its top rests at a level equivalent to U.32's base. The architectural significance of F.6 is uncertain. Similar rocks are found occasionally on platform summits where they appear to mark entrances. Feature 6 is the only one of these stones found outside a construction; possibly, it signifies a formal passage into the Op. 19 plaza between Strs. 59-1st and 60-1st.

Structure 60-1st, by the conclusion of TS.7, encompassed 6x7.5m (Including U.40 and 43), retained its earlier orientation of roughly 337 degrees as well as the division of the interior into three rooms. The building was expanded to the southeast by the addition of a 0.31m-high platform that may have covered the entirety of this flank. Two low cobble steps apparently provided access to the platform's summit near Str. 60-1st's new east corner. The southwestern foundation was enlarged and two steps may have been set near the building's center on this side to facilitate passage into Str. 60-1st. The floors of all three rooms were raised by the addition of an inferred 0.07-0.2m of dirt. Room 1 in the east lacks built-in features while its southwestern neighbor now contains a low stone shelf in addition to the sizable "bench" that still backs the enclosure on the southwest. Construction of the shelf, together with the addition of one new wall and erection of what may have been the building's center-post, effectively sealed the doorway that had previously linked Rooms 2 and 3. The latter now contains an L-shaped bench

that takes up just about all of the compartment's available space. How Room 3 was accessed during TS.7 remains a mystery. A surface-level room was seemingly built off Str. 60-1st's southwest flank late in the occupation sequence while a relatively insubstantial construction was raised ca. 3.2m to the northeast in the area previously filled by Str. 19-Sub3-1st. This last entity may not have been built until after Str. 60-1st was abandoned.

Footings and steps dating to TS.7 generally show less care in their construction than those raised in the previous span. River-worn cobbles remain the primary building material, though cut blocks were recorded in U.42 near Str. 60-1st's western corner and in U.40 on the southeast perimeter. The naturally flatter aspects of the larger rocks still tend to be oriented outward, though horizontal coursing is no longer as clear and chinking stones are now uncommon wall components. Unit 42 exhibits an unusual building style, its facing stones not being laid flat but set on end. The ubiquitous brown mud mortar is still the primary binding agent. Stone sizes range from 0.02x0.06m to 0.2x0.4m, with most falling towards the middle to small end of the continuum.

Time Span 8

Following abandonment of Str. 60-1st and its immediate environs, S.3 continued to accumulate against the building's northern corner (this is seen most clearly against U.21's northwestern end). Stratum 3 reaches a maximum thickness of 0.4m where it encounters U.21's northeast face. Beginning 0.61m northeast of U.21, S.3 is overlain by F.5, a 0.04-0.17m-thick level consisting of a dense concentration of pottery sherds and pebbles suspended in a coarse-textured, hard-compacted, brown soil. Feature 5 drops 0.37m over 2.24m southwest-to-northeast before leveling out for the northeastern-most 1.1m exposed in excavations (descending only 0.09m across the latter expanse). Feature 5 also drops 0.16m across 2.87m northwest-to-southeast, eventually coming to rest on top of U.13. This sherd-rich layer rides over F.1 near the middle of its exposed extent, S.3 pinching out northeast and southwest of this interface. In fact, the F.5 artifacts rest atop what appears to be an upward projection of the rock concentration contained within F.1 and described earlier (TS.5). These stones seem to have had an enduring effect on depositional processes in a limited area northeast of Str. 60-1st. Feature 5 could not be traced back to U.21, making it difficult to ascertain the temporal relation between this debris and the building's occupation. Since F.5 appears to terminate well up within the mass of tumbled architectural debris derived from Str. 60-1st (0.21m above F.4's base), it is likely that the artifacts it contains were jettisoned after the main building was no longer in use.

Strata 7 and 8 blanket all but the uppermost Str. 60-1st units. Both are moderately fine-textured, moderately hard-compacted soils distinguished by overlying S.8's slightly darker brown color and greater concentration of small roots. Together, S.7 and 8 collected to a maximum depth of 0.49m. Embedded within S.7 and 8 is a moderately dense collection of stones displaced from final-phase architecture (F.4). Feature 4 is found across all of Str. 60-1st and extends for up to 3.56m southwest and 1.24m northeast of U.43 and 21, respectively.

Structure 61

Structure 61 closes off the southwest corner of the Op. 19 patio, lying 25m southeast of Str. 57 and 6m southwest of Str. 62 (Excavation of Strs. 61 and 62 revealed that they had been connected near the end of their occupation sequence). The terrain here rises gradually from

south to north, ascending 0.3m across 9.4m in that direction. Approximately 35m² was cleared in the course of exposing most of Str. 61's summit along with portions of all four basal walls (Subops. 19B, F, L, N, O, and P). Digging was carried down to maximum depths of 0.6m below modern ground surface outside construction and 0.74m beneath ground level into architectural fill. A single major building phase, associated with at least one episode of significant renovations, was identified in the course of these investigations. All of the work was directed by S. Kane, N. Ross, and E. Bell.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1	-	LCLI/II?
2	Str. 61-1st	U.1-11	-	F.1	LCLII/III?
3	Str. 61-1st	U.12-24	-	-	LCLII/III
4	-	-	S.1-3	F.2	-

Time Span 1

Stratum 1 is a moderately coarse textured, hard-compacted, tan soil that runs beneath exposed architecture by at least 0.16m (its base was not exposed). This soil level was exposed to an insufficient depth to determine whether it contained cultural materials that had not percolated downwards from later levels. Recovery of artifacts from a nearly identical soil found beneath Str. 62 construction immediately to the east, however, implies that there was a significant human presence in the area while S.1 was being laid down.

Time Span 2

The earliest version of Str. 62-1st revealed in or excavations is a platform ascended on all sides by vertical stone facings standing 0.51-0.7m tall (U.1-4). The summit is dominated by a ca. 0.55m-high (on the southwest) stone faced and -surfaced bench that measures 1.8m across northeast-southwest by roughly 2.7m long northwest-southeast (U.5). The northwestern terminus is not obvious but, as the summit's northwest edge is within 0.5m of U.5's last preserved stones, it seems likely that the bench was never much longer. Unit 5 faces southwestward into a room measuring 1.2x2.6m and delimited by cobble footings 0.18-0.44m high (U.6-9 together with U.1 and 5). A small, rectangular niche is built in the enclosure's north corner and into the northwestern-most preserved 0.5m of U.5's southwest face. Unit 5 is recessed 0.4m here, the niche bounded by U.5-7 encompassing 0.5x1m. A 0.5m-wide gap between U.5 and 7 facilitated accessing the niche's interior. The southwest room wall (U.9) is 0.3-0.5m across over most of its extent, narrowing to 0.22m (one stone's width) over its northwestern-most 0.65m. Northwest of this point there is a 0.53m-wide gap separating U.9 from the reconstructed southwest end of U.8. This breach may signal the presence of a doorway set

into the enclosure's western corner. The room is paved with a mixture of cobbles and chinking stones (U.11).

On the northeast, the U.5 bench looks out across a 1.6m-wide space culminating in a ca. 0.2m drop faced by U.10. This poorly preserved riser marks the southwestern boundary of a 0.76m-wide terrace that culminates in the northeastern basal wall, U.2. The terrace surface may have been paved with cobbles, though the evidence is ambiguous. The space between U.5 and 10 may be yet another summit room bounded by U.1 on the south and, possibly, U.3 on the north (giving dimensions of 1.6x3.55m). Unfortunately, the northeastern portion of Str. 61-1st was so heavily disturbed that the form of this enclosure, let alone its very existence, could not be firmly established.

A layer composed of moderately coarse-textured, hard-compacted, orange soil was uncovered running southeastward from U.1 (F.1). Feature 1's top intersects U.1 at a point 0.14m below the latter's top and then slopes down 0.44m over 2.14m northwest-to-southeast underneath TS.3 construction (U.12 and 13). This deposit probably represents eroded building material (decayed bajareque in particular) that derives from Str. 61-1st's superstructure. That F.1 underlies later architecture suggests that the earlier building was allowed to deteriorate somewhat before the last recognized construction phase. Alternatively, F.1 may be building debris introduced as fill to support TS.3 renovations.

Overall, Str. 61-1st is a 0.51-0.7m-tall platform measuring 3.8x6.6m, aligned roughly 61 degrees. The summit supports a substantial bench standing as much as 0.55m high and covering 1.8x2.7m. This construction bounds a stone-floored room on the northeast that encompasses 3.1m². A niche measuring 0.5m² is located off the room's north corner and a possible door measuring 0.53m wide gap and set in the room's western corner provided access to the interior. Yet another enclosure may have been located northeast of the bench, this one measuring as much as 5.7m², though the evidence for this compartment is far from clear. A single, low, cobble-faced terrace ascends the edifice's northeast flank; no comparable elements were noted elsewhere on the platform. Foundations, facings, and the U.11 floor were all fashioned from unmodified cobbles set in a brown mud mortar. In most cases, the larger rocks were chosen for their naturally flatter aspects, which were placed facing outwards, and set into as many as four horizontal courses packed round with chinking stones. Unit 6 has relatively few chinking pebbles as does U.10, while U.7 not only has very few of these small rocks but lacks clear coursing and its stones were not selected for their flat faces.

Time Span 4

During this interval, Str. 61-1st was expanded to the southwest, southeast, and northeast by the construction of an extensive terrace the vertical faces of which stand a preserved 0.27-0.32m high (U.13-15). The southwestern component (U.15) intersects U.4 ca. 0.5m southeast of the latter's western corner with U.3 and is 5m long by 0.14-0.45m wide. Unit 14 on the northeast is comparably narrow (0.3-0.4m) and was traced over a northwest-southeast distance of 4.3m. It is unclear whether U.14 junctions with Str. 62-1st's TS.2 basal wall (U.2) prior to the latter's terminus or if both constructions run the same distance northwestward. Unlike the above constructions, U.13 on the southeast fronts a fairly broad terrace, measuring 1.87m across. There is some evidence that constructions were raised atop this extensive surface. Units 23 and 24 are low (ca. 0.15m high) blocks of cobbles that project 0.35-0.4m southeast of U.1, which they abut. These constructions measure 0.3-0.35m across and may have been parts of

foundations that bordered a 1.4m-wide room set atop the southeastern terrace. Whatever its other function(s) might have been, U.23 is apparently the northeast face of a 0.75x3m southeastward extension of the summit retained by U.12 on the southeast and an extension of U.9 on the southwest. Unit 9 projects 0.45m southeast beyond U.12, though it is not clear why this was the case. Unit 12 rests on F.1, is backed by a fill of hard-packed tan earth (U.19), and is sufficiently high (0.37m) that it might, in part, represent a southeastward expansion of the U.5 bench. A clearer enhancement of U.5 involves construction of U.17 on the northeast. Addition of this facing transformed U.5's northeast-southwest dimension to 2.6-2.7m. Unit 17 contains a fill consisting of small to medium-size cobbles suspended in a brown soil (U.18).

A 1.75-2.3m-wide terrace was appended onto Str. 61-1st's northeast flank relatively late in the construction sequence (U.20). Unit 20's northeast face stands a preserved ca. 0.3m high and follows a fairly irregular line that generally steps back to the southwest over its uncovered 2.65m northwest-southeast length. On the northeast, U.20 joins the southwest extension of Str. 62's U.9 (described under Str. 62, TS.3), the latter now defining the terrace's northwest flank. Unit 20's southeastern terminus was not identified, though it was traced to a point approximately 0.5m northwest of Str. 19-Sub7 (see below, Str. 62). It is very likely, therefore, that U.20 was not much longer than its exposed 2.65m. This late northeastern terrace, therefore, would not have run the full length of Str. 61-1st's northeast flank but stopped roughly 1m and 1.45m short of the platform's eastern and northern corners, respectively. Unit 20 is backed by a fill composed of densely packed cobbles set in a tan to brown soil matrix (U.21). There is no clear evidence for a formal floor capping the U.20/21 terrace. Unit 14, Str. 61-1st's northeast basal facing during TS.3, would still have protruded ca. 0.1m above U.20.

Unit 16, a ca. 0.2m-high wall, seems to have been the riser for a 1.45-1.6m-wide terrace fronting Str. 61-1st's northwest flank. Extending 1.25m west from Str. 61-1st's south corner is U.22, a 0.25m-high by 0.36m-wide cobble wall (U.22). Unit 22 abuts U.15 and is most likely the remains of a foundation for a surface-level construction raised against Str. 61-1st's southwest flank.

Structure 61-1st, by the end of TS.3, covered 5.5x7m (excluding the U.16 and U.20/21 terraces), retains the earlier orientation of ca. 61 degrees, as well as its height of 0.51-0.7m. All sides were now ascended by at least one stone-faced terrace, three risers facing the building's northeastern flank. The summit bench was considerably enlarged, now encompassing 2.6-2.7m northeast-southwest by at least 2.7m and, perhaps, as much as 3.9m northwest-southeast. The putative northeastern room was reduced in size commensurate with expansion of the bench, covering 2.5m² during TS.3. The southwestern enclosure may have been expanded slightly to the southeast, but was otherwise unchanged. This compartment encompasses ca. 4m². The broad southeastern terrace may have supported one or more rooms delimited by cobble foundations, in addition to construction related to the summit enlargement, but the numbers, forms, in fact, the very existence, of these enclosures were not established. A surface-level edifice may have been raised against Str. 61-1st's southwest basal facing near the close of TS.3. The net result of the renovations that define TS.3 was an increase in the elevated living area associated with Str. 61-1st and heightened crowding along the Op. 19 patio's south flank. Structures 61-1st and 62-1st may have been joined at this time and a small construction (Str. 19-Sub7-1st; see below, Str. 62) may have been sandwiched in between these adjoining edifices.

All foundations and facings are made primarily of unmodified river cobbles, the naturally flatter aspects of which face outwards (U.22's stones were not apparently selected for their flat faces). The larger stones are generally set in horizontal courses and packed round with chinking

stones. Clear coursing is absent in U.22 and the northwestern half of U.20, whereas chinking stones are uncommon in U.16, 23, and the southern half of U.20. Chinking stones comprise foundations for U.12, 14, and 15. A brown mud mortar was used as a binding agent in each case.

Time Span 4

Following abandonment, Str. 61-1st was blanketed by the continued natural deposition of S.1 and the introduction of S.2-3. Stratum 1 covers basal facings and is, in turn, overlain by two moderately coarse-textured, hard-compacted soils (S.2 and 3) that are distinguished by slight color differences (brown in S.2, dark brown in overlying S.3) and the greater density of small roots in S.3. Together, these levels cover all but a few of Str. 61-1st's uppermost stones. Embedded in upper S.1 through S.3 is a moderately dense to very dense concentration of stones fallen from final-phase architecture (F.2). Tumbled debris is found across and off all of the platform's sides, being especially concentrated on the northeast flank where it mixes with rocks displaced from neighboring Str. 62-1st.

Structure 19-Sub9

Structure 19-Sub9, lying 1.44m southeast of Str. 61-1st, went undetected during survey and was found accidentally during clearing of the latter building. The land occupied by Str. 19-Sub9 slopes up from southeast to northwest, rising ca. 0.35m over 4.5m. Excavation of approximately 15m² revealed the entirety of the building's southwest and southeast perimeter walls along with about half of the northwestern and a third of the northeastern walls. The interior was not investigated to any significant extent. Digging was carried down to 0.56m below modern ground surface outside architecture, this work revealing a single clear building phase along with evidence of earlier construction (Str. 19-Sub10). All of this work was overseen by E. Bell.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1	-	LCLI/II?
2	Str.19-Sub10-1st	U.1	-	-	LCLII/III?
3	Str. 19-Sub9-1st	U.2-7	-	F.1	LCLII/III
4	-	-	S.2,3	F.2	-

Time Span 1

Stratum 1 is a moderately fine-textured, moderately hard-compacted, tan soil that underlies all construction. The limited portion of S.1 exposed in our excavations (ca. 0.05m deep) was insufficient to determine whether this layer contained cultural material that was

unlikely to have percolated down from later deposits. A very similar soil (S.1) found underlying Str. 62-1st architecture immediately to the northeast did contain artifacts, however, implying a human presence in the immediate area while S.1 was being laid down. Stratum 1 in the vicinity of Str. 19-Sub9 is a continuation of S.1 identified to the northwest under and around Str. 61 and, most probably, S.1 uncovered in Str. 62's environs.

Time Span 2

Structure 19-Sub10-1st is represented solely by U.1, a 0.12m-high by 0.13m-wide (one stone tall and across) wall that runs for at least 1.25m northwest out from under the junction of U.3 and 4. Unit 1 is 0.07m below the base of the U.3/4 corner and rests in S.1. Though the evidence is very limited, U.1 probably is a foundation from a surface-level edifice that was aligned roughly 140 degrees, 30 minutes. Unmodified river cobbles are the primary material from which U.1 was fashioned. These distinctive, blue-colored stones are set in a tan mud mortar; no chinking stones were noted in this restricted exposure.

Time Span 3

Structure 19-Sub9-1st appears to be a surface-level building defined by stone foundations rising 0.22-0.34m high (U.2, 4-7). The edifice seems to have been entered through a 1m-wide door set in the approximate center of the southwestern footing. Immediately southeast of the putative entryway, the foundation steps out 1m to the southeast (U.3) before continuing to its south corner (U.4). Unit 3 is only 0.12m high; if this difference in height *vis a vis* the other perimeter walls is not simply a product of variable preservation, then the door may have been screened by a low wall too insubstantial to have supported significant upper construction. A 1m-wide segment of U.5, the southeastern footing, is inset 0.2-0.25m into that wall beginning 1.3m northeast of the southern corner. The base of the inset is ca. 0.1m higher than that of the rest of U.5, a discrepancy that may be a consequence of the southwest-to-northeast rise in ground surface here. A second stone line is barely discernible 0.3m northwest of the inset's southeast face, the naturally flat faces of its component rocks facing southeastward (F.1). Feature 1 stands ca. 0.18m above U.5, its southwest end coterminous with the margin of the inset; its northeastern terminus was not revealed. The architectural significance of F.1 is not clear, though it may well be the remnants of a construction predating the U.5 inset. How much of a temporal gap intervened between the fashioning of these two elements is unknown.

Overall, Str. 19-Sub9-1st is a surface-level building that encompasses 4.55x4.9m (maximum) and is oriented very approximately 61 degrees. At least one, 1m-wide door built into the southwestern footing, and shielded by a low cobble wall on the southeast, provided access to the interior. The latter space was not cleared and so we can advance no suggestions as to how many rooms Str. 19-Sub9-1st may have contained or how these were floored and furnished. Stratigraphic relations suggest that Str. 19-Sub9-1st was raised at about the same time as the renovations conducted on adjacent Str. 61-1st (TS.3); the adjacent basal/perimeter walls of both buildings (U.13 and 7) are set within and rise above S.1, the base of Str. 19-Sub9-1st's U.7 being ca. 0.1m below that of Str. 61-1st's U.13. This difference is commensurate with the general southeast-to-northwest upward slope of the local terrain. Unmodified river cobbles, their naturally flatter faces directed outwards, are the primary stones that were used in constructing Str. 19-Sub9-1st's foundations. The larger rocks tend to be set in horizontal

courses and are packed round with chinking stones. Units 4 and 6 lack clear coursing while chinking pebbles are uncommon in U.3. A few cut blocks are intermixed with the cobbles in U.6 and 7; no consistent pattern was noted in their placement within these footings. A brown mud mortar serves as a binding agent in all foundations.

Time Span 4

Following abandonment, Str. 19-Sub9-1st was covered by the natural deposition of S.2 and 3, two moderately coarse-textured, hard-compacted soils distinguished solely by overlying S.3's darker brown hue and greater concentration of small roots (these layers represent continuations of S.2 and 3 that blanket Str.61-1st to the northwest). Strata 2 and 3 accumulated to 0.4-0.45m above S.1 and completely obscured Str. 19-Sub9-1st. Moderate to dense concentrations of rocks displaced from final phase architecture were found off all of the building's flanks, though they were densest on the southwest side (all included in F.2). On the northwest, F.2 extends for 0.7m away from U.7 before encountering debris emanating from Str. 61-1st.

Structure 62

Structure 62, as measured on the surface, is ca. 6m southwest of Str. 60 and an equivalent distance east of Str. 61. Excavations, however, revealed that the former edifices lie only 4.1m distant while Strs. 61 and 62 were joined by construction. Structure 62 closes off the south side of the Op. 19 patio, occupying land that ascends gradually from south to north, the terrain currently rising 0.52m over 12.8m in that direction. Excavations here, conducted within Subops. 19F, G, J, and K, cleared the entirety of Str. 62 (ca.66m²), digging being carried down to maximum depths of 0.73m below modern ground surface outside architecture and 0.8m beneath ground level within the building (but not in fill contexts). Two construction phases, the second associated with at least one period of significant renovation, were identified in the course of this work in addition to two buildings that had gone undetected during mapping (Strs. 19-Sub7 and 19-Sub8). The investigations were directed by N. Ross and J. Douglass during the 1990 field season.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1	-	LCLI/II?
2	Str.62-2nd Str. 19-Sub8-1st	U.1 U.17	S.1,2 -	- -	LCLII?
3	Str. 62-1st	U.2-9,11,12 18,19	-	F.1	LCLII
4	Str. 62-1st	U.10,12-13,21-		F.2-4	LCLII/III

	Str. 19-Sub7-1st	U.14-16	-	-	
5	-	-	S.2,3	F.5	-

Time Span 1

Stratum 1, a coarse-textured, hard-compacted, tan soil, underlies all exposed architecture by as much as 0.21m (the base was not encountered). Recovery of artifacts from S.1 indicates human settlement in the area during S.1's deposition.

Time Span 2

Structure 62-2nd is represented solely by U.1, a 0.46m-high, 0.3-0.45m-wide stone wall that runs 1.84m northeast-northwest (82 degrees, 30 minutes) from U.8 before changing to a northeast-southwest orientation (238 degrees) for the remaining 4.75m it was exposed. The latter stretch was revealed in three discontinuous segments. Unit 1 runs beneath architecture raised during TS.3 and 4. The wall's eastern and western termini are not clear and it is likely that the entity continues southwest of the furthest point revealed in our excavations. On the southeast, it appears that U.1 stops at U.8 (though the latter postdates the former) but excavations were not continued to a sufficient depth to permit definitive confirmation of this supposition. Unit 1 is set on S.1 and is fashioned of medium to small cobbles that are not set in horizontal courses. Stone sizes range from 0.05x0.11m to 0.12x0.22m and all rocks are set in a tan mud mortar. Chinking stones were not used nor was much effort apparently expended during U.1's construction in locating rocks with flat faces (or modifying them to achieve such aspects). Unit 1's top is 0.26m lower than it is elsewhere beginning at the change of direction noted above and continuing for at least 1m southwestward where the element runs beneath U.6. This change in elevation apparently resulted from modifications visited on U.1 during TS.3.

Ultimately, Str. 62-2nd appears to be a 5.59m-long (minimally), 0.46m-high cobble wall that is variably oriented 82 degrees, 30 minutes and 238 degrees. Though the evidence is far from clear, Str. 62-2nd seems to be a free-standing wall possibly designed to close off the Op. 19 patio's southern flank.

Structure 19-Sub8-1st, consisting of U.17's revealed portions, is 5.4m northwest of Str. 62-2nd. Unit 17 is a 0.37m-tall by 0.57m-wide cobble wall that was exposed running at an azimuth of 242 degrees, 30 minutes for a distance of 2.65m. The entity's eastern corner was unearthed, a segment of cobble wall projecting 0.85m north/northwest of U.17's apparent northeastern end (both wall portions included in U.17). Structure 19-Sub8-1st's southern corner was not identified. Like U.1, U.17 is set on S.1, its base lying 0.26m below that of Str. 62-1st's U.9, 1.4m to the southeast. Though the relationship between U.17 and later construction is less obvious than was the case with U.1, these stratigraphic relations strongly argue for inclusion of U.17 in TS.2.

Structure 19-Sub8-1st may have been either a surface-level construction or low platform aligned roughly 242 degrees, 30 minutes. In either case, it appears to have been a relatively modest construction. The edifice's basal walls/foundations are built of unmodified river cobbles the naturally flatter faces of which are directed outwards (southeast and northeast). The larger rocks are placed in two-to-three horizontal courses packed round with chinking stones. A tan mud mortar is used as a binding agent. After Str. 19-Sub8-1st's abandonment, much of its

southeast flank was buried by a segment of S.1 soil rich in cultural material. This ca. 0.3m-thick deposit includes large quantities of pottery sherds, bajareque fragments, conch shell debris, and carbon flecks. The generally southeast-to-northwest downward tilt to the embedded artifacts implies that the material was introduced into the area from the former direction. Roughly 0.07m of U.17 might still have projected above S.1 after the latter's deposition was completed.

Approximately 0.05m of S.2, a coarse-textured, hard-compacted, brown soil containing numerous small pebbles (3mm or less in diameter), was laid down atop S.1 prior to the initiation of TS.3 construction.

Time Span 3

Structure 62-1st is a surface-level building that is delimited by stone foundations (U.2-6, 8-9, and 12) that are 0.2-0.53m high by 0.4-1.1m wide (75% of the footings measure 0.4-0.8m across). These elements, combined with the surviving portion of U.1, to define four earthen-floored enclosures (Rooms 1-4). Room 1, the largest compartment, is on the south and covers 2.05 by 4.55m (measured across the center). A 1.5m-wide trapezoidal-shaped extension of U.2 projects 0.25m southward into the compartment (included with U.2). Room 1's southern exterior corner is irregularly shaped, stepping in twice from northeast to southwest (0.3m and 0.15m, respectively). Unit 4, the southeastern room foundation, is also thinner here, measuring 0.4m, as opposed to its more common 0.6m, wide and the nature of construction changes in this 0.85m area separating U.4 and 5. The above discrepancies may have resulted from the sealing a doorway that once existed here. Said passage, as noted earlier, would have been 0.85m wide. Closing of that entryway was probably followed by the construction of a low step that abuts U.4 slightly northeast of the footing's center (U.18). Unit 18 consists of a single large cobble, measuring 0.35m on a side, that abuts U.4. Room 1 is built on a south-to-north ascent, the base of the enclosure's northwestern foundation (U.2) resting 0.39m above that of its southeastern counterpart (U.4). A concentration of bajareque fragments, some tilting down north-south, was found at a level equivalent to U.2's base in Room 1's southern interior corner (F.1). No built-in furniture was found in Room 1. Unit 2, at 1.1m wide, is one of the most substantial walls within Str. 62-1st. Possibly, this entity both supported an upper wall of perishable material and served as a bench facing southeast into Room 1.

Room 2 borders the aforementioned enclosure on the northwest and is delimited by U.2, 6, 8, and a portion of U.1. Unit 1 was reduced in height by 0.26m along a 1m-long stretch between U.6 and the point where U.1 turns to the southeast. This 1m-long segment of U.1 would have been barely visible above floor level. The remaining 1.84m of the wall, now protruding about 0.26m above the living surface, divides Rooms 2 and 3. The above modifications created a doorway connecting these two enclosures. Passage into Room 2 from extramural areas was through a 0.5m-wide entryway set into the enclosure's east corner. No built-in furniture was identified in Room 2 though the 2.35m-long segment of U.2 backing the compartment on the southeast is wide enough (1.1m across) to have functioned, in part, as a bench. Unit 6 on the southwest is also sufficiently substantial (1.7m long by 0.9m wide where it borders Room 2) to have been used as a bench. Units 2 and 6 are 0.53m and 0.26m high respectively. Room 2 measures 1.05-1.65m northwest-southeast by 2.5m northeast-southwest.

Room 3 borders Room 2 on the northwest and is delimited by U.1, 6, 8, and 9. The enclosure measures 2.4x2.6m and was entered through a 0.72m-wide doorway in the northeast foundation (U.8). Room 3 contains no obvious built-in furniture, though the 1.5m-long segment

of U.6 that defines the compartment's southwest flank is wide enough (0.9m across) to have served as a shelf and a support for perishable upper walls.

Room 4 lies immediately west of Room 3, passage between the two enclosures being through an ample (1.4m-wide) gap between U.6 and 9. Units 6, 9, and the northwestern 0.85m of U.12 border Room 4 on the southeast, northwest, and southwest, creating a diminutive space covering approximately 1.3m on a side. The only construction found within Room 4 is a stone-lined and surfaced square built against U.6's northwestern edge (U.7) in the gap between that wall and U.12. Unit 7 measures roughly 0.6m on a side and its walls rise 0.08-0.12m (equivalent to one stone's thickness) above the large cobble that serves as U.7's floor. That stone encompasses 0.3x0.4m, virtually filling U.7's interior. A distinctive orange soil is concentrated in the northeastern-most 0.15m of U.7, resting on and extending for 0.06m above the floor. A very red earth, most likely derived from decayed bajareque, is found on U.7's southeast margin. A large fragment of this material is integrated into U.7's east corner. Significant quantities of artifacts, especially marine shell fragments, were recovered from U.7's floor and immediate environs. Unit 7's walls do not seem substantial enough to have stood above Room 4's living surface; more likely, this square was recessed 0.08-0.12m below the enclosure's floor.

Structure 62-1st's northwestern footing (U.9) extends for at least 1.85m southwest of its junction with U.12 and most probably covered the additional 0.75m to link up at some point with Str. 61-1st. Whether this extension was effected in TS.3 or 4 is uncertain. We were not able to discern a significant change in building style that might have marked a late addition to U.9. This observation implies that U.9 was built as part of a single effort. Nevertheless, the foundation is characterized by a casual construction style that thwarts efforts at recognizing breaks in its construction. For the moment, therefore, U.9 in its entirety is included in TS.3, though we strongly suspect that the portion southwest of U.12 was added later during the northeastern expansion of Str. 61-1st (U.9 in this area serves as the northwest facing for a terrace extending northeastward from the latter edifice; see above).

Unit 11 is a 0.27m-high block of stone integrated with and protruding 0.15-0.3m northwest of U.9's southwestern extension. The construction measures 0.35m across and its top is 0.13m below that of U.9. Unit 11 is, most likely, a step facilitating access to Str. 61-1st's northeastern terrace.

Unit 1's fate within Str. 62-1st has been discussed above. As the building's southwest perimeter wall, U.6, runs over the top of U.1's dismantled portion, it is almost certain that the earlier wall was at least partially demolished to make way for U.6. Starting immediately southwest of U.6, however, U.1 was apparently maintained at its original height for at least 2.86m. Unit 6's southwest face rests on top of U.1, strongly suggesting that the latter construction was buried under as little as 0.2m and as much as 0.36m of a brown earth fill (U.19) during TS.3 (the uncertainty in fill thickness results from our inability to determine how much of U.1 originally stood above ground surface and how much was intruded beneath that level and the virtual identity of U.20 and overlying S.2). The living surface southwest of U.6 would, therefore, have been elevated ca. 0.2m above the Room 2 floor. The situation further to the northwest where U.6 borders Room 3 is unclear, though U.12's northwestern segment was apparently not set on such elevated terrain.

By the end of TS.3, therefore, Str. 62-1st is a surface-level edifice that measures 8.5m northwest-southeast by 5-6m northeast-southwest (excluding U.9's southwest extensions and steps set against that entity and U.4). The building is oriented roughly 151 degrees by 250

degrees, 30 minutes and contains four earthen-floored enclosures. Rooms 1-3 are arranged in a southeast-to-northwest line, with Room 4 situated off Room 3's west corner. The enclosures cover 9.3m² (Room 1), 3.4m² (room 2), 6.2m² (Room 3), and 1.7m² (Room 4). One or two particularly substantial walls bordering Rooms 1-3 may have doubled as foundations and benches/shelves. A stone-lined and -surfaced square in Room 4 is sunk 0.08-0.12m below Room 4's floor and is associated with a bajareque upper construction and large quantities of exotic (i.e., marine shell) debris. Access to Str. 62-1st's interior was through doors set into the footings of every room save 4; Room 1's entryway was apparently changed from a corner passage to a step-up over its southeast foundation. Movement between Rooms 2, 3, and 4 was through wide doorways, but it is not clear how, or if, Room 1 was accessed from inside Str. 62-1st. Though the evidence is ambiguous, the introduction of 0.2-0.36m of earth fill southwest of Str. 62-1st created a living surface in this extramural zone ca. 0.2m above that found in Room 2.

The primary building material used to fashion constructions associated with Str. 62-1st is the unmodified river cobble. Cut stone blocks are occasionally mixed with these water-worn stones, being found in U.4, 6, 8, and 11. There is no consistent pattern to the placement of masonry within the above foundations. In general, cobbles with naturally flat aspects were chosen for inclusion in construction, these faces oriented outwards (U.8 is an exception). The larger rocks are set in horizontal courses within U.2, 3, 5, 6, and 12; such systematic stone placement is not attested to in the other elements. Chinking stones are used to fill in gaps between sizable rocks in all foundations, though nowhere are they very common. Units 2 and 6 are built with the largest number of chinking pebbles, U.8 has the fewest, and the remaining components occupy intermediate positions within the continuum. A brown mud mortar was used as a binding agent in all units.

Time Span 4

This interval witnessed the expansion of Str. 62-1st southwestward towards its nearest neighbor, Str. 61-1st. Room 4's floor was apparently raised ca. 0.1m at this time by the introduction of a brown earth indistinguishable from overlying S.2. This fill (U.21) buried the U.7 square and supported the 0.3m-high construction that projects 0.4-0.5m southeast from U.9 (U.10). Unit 10 measures 0.6m across at its junction with U.9 and was probably built to create, along with U.6 to the south, a 0.9m-wide doorway into Room 4. Room 4 probably still existed in TS.4, though its floor was somewhat higher than in the preceding interval and its northeastern passage to Room 3 was more formalized. It is possible that the earthen Room 2 and 3 floors were also augmented in TS.4, though there is no strong evidence indicating that such enhancement occurred. A dense deposit of artifacts, primarily pottery sherds but including some marine shell detritus, was found at and for 0.05m below the putative level of Room 3's floor (F.2). Feature 2 may represent debris associated with the use of the northwestern compartment.

No significant changes were noted in the other enclosures. A ca. 0.2m-high wall may have extended 0.92m northwest into Room 1 from U.4's approximate center (F.4). Further clearing did not establish F.4's validity; if it was a purposeful construction it was remarkably casual.

The major constructions assigned to this interval are located on Str. 62-1st's southwestern margin. Here, U.12 was extended 2m southeastward, paralleling and only 0.25m southwest of, U.6. This addition to U.12 is marked by a clear change in construction and the elevation of the

footing's base by ca. 0.2m. The latter observation suggests that U.12 was now being raised over elevated terrain, a change that most likely resulted from the introduction of earthen fill either during TS.3 or now. Unit 12 joins with U.13 on the southeast, the latter resting on an upward augmentation of U.20's brown earth fill. Roughly 0.15m of this soil was added now, leaving only 0.05-0.1m of U.6 still visible on the southwest. The same vertical relationship pertains between U.6 and U.12's southeast extension. Unit 13 overlaps the southeast end of U.12-southeast and projects an additional 1.8m southeast to an abutment with U.2. Units 12-southeast and U.13 are ca. 0.3m high by 0.2m (U.13) to 0.64m wide (U.12-southeast) and constitute foundations that now define the northwest segment of Str. 62-1st's southwest flank. Unit 12-southeast apparently supplements or replaces U.6 in this capacity while U.13's construction created a compartment bounded by U. 2, 6, and 13 (Room 5). Room 5 measures 1.15x1.55m (across the center), has an earth floor, and lacks built-in furniture. Unit 6, still barely visible on the northeast, might have now been a bench shared by adjoining Rooms 2 and 5 (see above, TS.3). Feature 3 is a level of bajareque fragments found directly underlying U.12-southeast and U.13. The significance of this layer is unclear; it may suggest that perishable constructions erected southwest of Str. 62-1st during TS.3 were leveled prior to raising that building's TS.4 architecture.

Structure 62-1st's form and dimensions are largely unchanged from TS.3. The raising of living surfaces southwest of U.6 apparently continued along with the creation of a fifth enclosure southwest of Room 2. This new compartment covers approximately 1.8m² and may have been accessed by passing over U.6 from Room 2. Further northwest, U.12 was extended southeastward; U.12 and 13 now defining the building's southwest perimeter. Room 4's doorway into Room 3 was formalized by the addition of a doorjamb adjoining U.9, the northwest foundation. The U.7 stone-lined box was apparently blanketed by the introduction of earth fill designed to raise Room 4's floor by ca. 0.1m.

Structure 19-Sub7-1st is an enclosure measuring 1.25m northeast-southwest by, minimally, 1.4m northwest-southeast (its southeast flank was not found). It is situated 0.65m southwest of U.13. The walls delimiting this entity (U.14-16) are aligned roughly 228 degrees, stand 0.2m high, and ride 0.05m above the top of U.1. Units 14-16 are equivalent in depth to U.12-southeast and U.13, resting on the same U.20 fill, indicating that Str. 19-Sub7-1st is a relatively late construction wedged in between Strs. 62-1st and 61-1st on the northeast and southwest. It is unclear whether Str. 19-Sub7-1st is a low platform or a surface-level construction.

Time Span 4 architecture is fashioned from unmodified river cobbles set in a brown mud mortar. The naturally flatter aspects of these river-worn stones are generally placed facing outwards. Horizontal coursing is not pronounced in any of these elements and chinking stones are relatively scarce.

Time Span 5

Following abandonment, Str. 62-1st and its immediate environs were covered by the continued deposition of S.2 and the introduction of S.3. Stratum 2 collects to a maximum thickness of 0.42m and is capped by a 0.1m-thick level of moderately coarse-textured, moderately soft-compacted, dark brown, root-rich soil (S.3). Together, these layers cover all but the topmost stones of final-phase architecture, effectively masking Str. 62-1st's final form, not to mention the entirety of Strs. 19-Sub8-1st and 19-Sub7-1st, from view. Embedded in S.2

and 3 is a light (on the southeast and across the buildings) to moderately dense (on the northwest) concentration of stones displaced from TS.4 architecture (F.5). Feature 5 extends for roughly 0.8m southeast of Str. 62-1st and for at least 3.16m northwest of that edifice. The greater concentration of tumbled rock in the latter direction may be a consequence of contributions derived from other buildings surrounding the Op. 19 patio (the amount and extent of architectural debris on the northeast was not determined, while on the southwest material fallen from Strs. 62-1st, 61-1st, and 19-Sub7-1st all collected in the same narrow area).

Chronological Summary

A few diagnostic Middle Preclassic pottery sherds found in the vicinity of Str. 60 constitute the only signs of pre-Late Classic occupation in the Op.19 area. Most likely, these fragments were dislodged from deeper deposits located somewhere nearby and were mixed with material dating to later periods. No architecture or features could be clearly dated to this interval.

Use of the Op. 19 area began in earnest towards the end of Late Classic I and the beginning of Late Classic II. Material dating to this span is clearly attested to within a tan soil underlying architecture at Strs. 57 and 58 (assignment of preconstruction levels at Strs. 61, 62, and 19-Sub9-1st to Late Classic I/II is based on the presence of similar soils deposited prior to building activities in each case and the close proximity of these edifices to Strs. 57 and 58). Structure 19-Sub1-1st, an apparent surface-level building, may have been raised now northeast of Str. 60. Late Classic I/II occupation, therefore, seems to have been widespread throughout the Op. 19 plaza area associated with the erection of relatively modest buildings.

All the rest of exposed architecture was built and used during the period that spanned Late Classic II and the early part of Late Classic III. The Op.19 plaza took its final form at this time and supported a population of significant size busily engaged in constructing and renovating structures of varying dimensions and forms. The concentration of so much building activity within this period implies that Op. 19's residents were participants in dynamic processes that spurred a rapid sequence of changes in the organization of spaces for living and working.

How long settlement in Op. 19 persisted into Late Classic III is uncertain. The plaza, at least, was apparently abandoned by the Early Postclassic and there is no sign of subsequent occupation throughout the remainder of the prehistoric and all of the historic periods.